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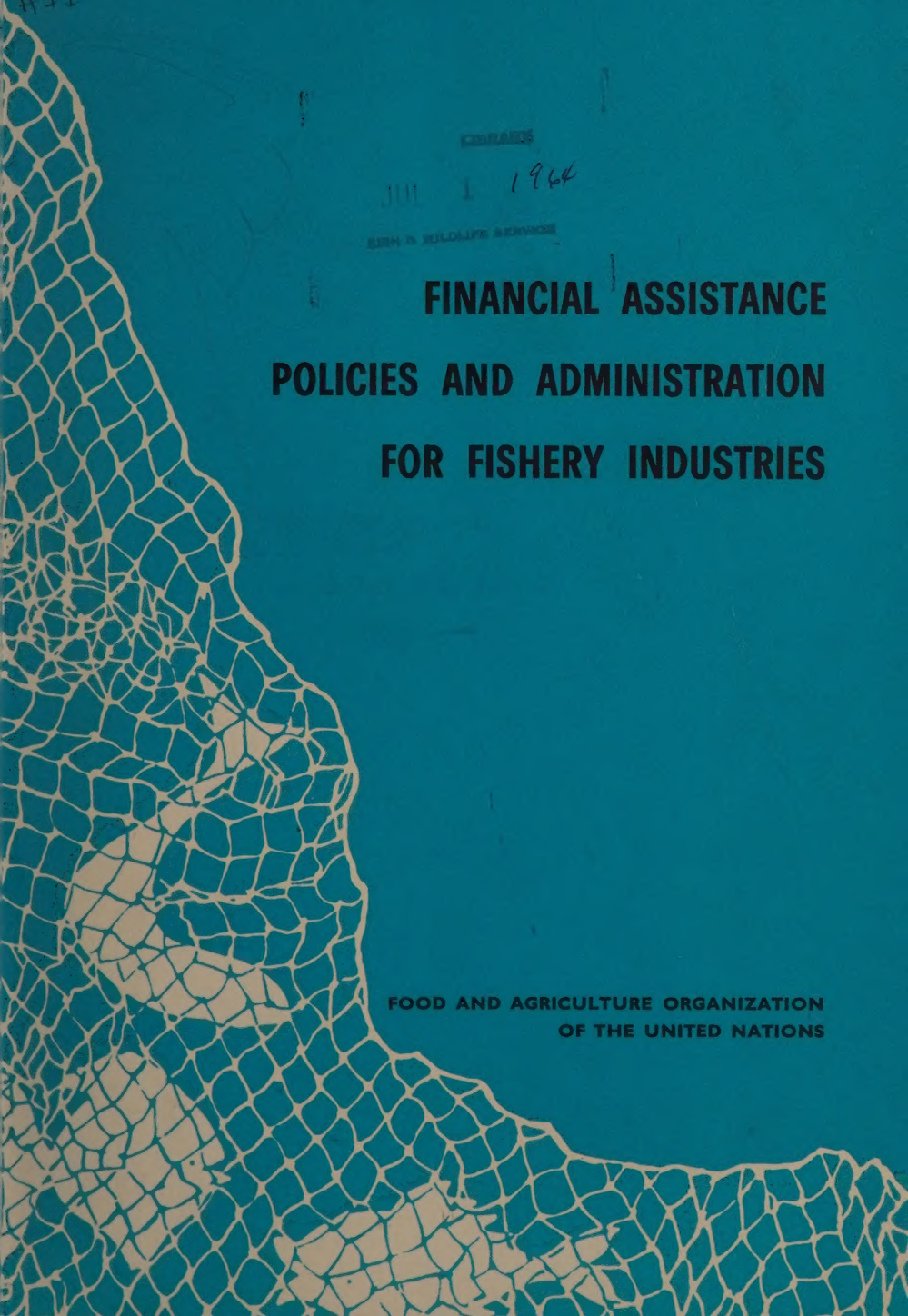
FINANCIAL ASSISTANCE POLICIES AND ADMINISTRATION FOR FISHERY INDUSTRIES



FOOD AND AGRICULTURE ORGANIZATION
OF THE UNITED NATIONS

FINANCIAL ASSISTANCE POLICIES AND ADMINISTRATION FOR FISHERY INDUSTRIES

FINANCIAL ASSISTANCE POLICIES AND ADMINISTRATION FOR FISHERY INDUSTRIES

by

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FOREWORD

A basic aim of the Food and Agriculture Organization of the United Nations is to encourage greater production and better distribution of food and to improve nutritional standards, especially in the less developed regions. Since 1945, when FAO was established, much progress has been made toward this end through the work of international, multilateral, bilateral and national organizations. FAO has taken a leading part in this work.

But, despite all that has been done, the problem of hunger remains unsolved and, indeed, threatens to grow larger. A recent FAO study shows that between 300 and 500 million people suffer from actual lack of food and between one third and one half of the world's population of about 3,000 million from varying degrees of malnutrition. Unless drastic action is taken, more millions will join them in the coming years as the result of the rapid increase in world population. This is expected to double itself by the end of this century, when the total is likely to exceed 6,000 million.

It was because of the continuing nature of the hunger problem and the threat of its becoming worse in the next four decades that the Director-General of FAO, Dr. B. R. Sen, proposed the Freedom from Hunger Campaign which was launched on 1 July 1960. The Campaign, which is being supported by people in all countries as well as by the United Nations and all the Specialized Agencies and Member Governments of FAO, is, in effect, a rededication to the objectives of the charter of FAO. In particular it seeks to focus world attention on the continuing problem of hunger and to create a climate of opinion which might lead to a massive attack on the problem on a global scale.

A vital part of the Campaign is therefore concerned with information and education - that is, spreading knowledge and understanding of the magnitude of the hunger problem and explaining what can be done to solve it. In this respect, every publication that deals with any aspect of the problem - technical, economic or social - is a contribution to the Campaign, and thus to the goals of FAO.

This book is in this category. It is the third of a series of publications by FAO on the role of financial aid schemes in fishery development. The two preceding studies, *Financial assistance schemes for the acquisition or improvement of fishing craft* and the *Report on the technical*

7. ADMINISTRATION OF AID SCHEMES 75
The applicant 75
The project 80
Conditions of approval 87
Inspection, and payment of assistance 93
Loan terms and interest rates 96
Repayment of loans 100
Defaults and remedies 105
Records and returns 108
Administrative personnel and costs 109

8. CO-ORDINATION AND REVIEW OF FISHERY CREDIT POLICIES 113

INTRODUCTION

This study was undertaken in response to a recommendation of the Technical Meeting on Credit for Fishery Industries held in Paris from 17 to 22 October 1960. The principal objective of this meeting organized by the Food and Agriculture Organization of the United Nations (FAO) was to provide a forum for an exchange of views and experience in the organization, administration and evaluation of fishery credit systems in FAO member countries. The widespread interest in this meeting was reflected by the participation of a large number of member countries and the preparation of forty working papers giving background information on schemes in operation.[1]

In the course of the discussions at the meeting it was suggested that a special study on fishery credit problems should be commissioned by FAO, the proposed study to be based, in part, on the working papers which had been contributed and, in part, on the discussions at the meeting. This suggestion was favorably received by FAO, and the author of the present study, who was a participant at the Paris meeting, was invited to undertake it on behalf of the Organization.

In this study, attention has been focused on the basic problems of organizing and administering credit schemes, in both developed and developing countries. While numerous references are made to practices and experiences in specific countries, they are intended to illustrate the application of principles of operation and administration rather than to describe in detail particular schemes. The latter has been done for a selected number of schemes in FAO Fisheries Studies No. 9.[2]

A few words of explanation may usefully be included here about certain

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[1] See *Report on the technical meeting on credit for fishery industries, Paris, 17-22 October 1960.* Edited by R. Hamlisch, FAO, Rome, 1961. A limited number of copies of this report is obtainable free of charge upon request to FAO.

[2] *Financial assistance schemes for the acquisition or improvement of fishing craft*, by C. Beever and K. Ruud. FAO, Rome, 1960.

terms employed throughout this study. The term credit will be used in the broader sense of financial assistance of various kinds, rather than in the restricted meaning commonly used in monetary discussions. Financial assistance available to fishery industries takes many forms. Besides short- and long-term loans on normal terms, assistance is given in the form of specially favorable loan terms, monetary grants, operational subsidies, rebates of taxes and import duties, and in other ways. References to all these variants will be made to the extent that they are encountered in the field of fisheries.

While financial aid is an important and significant feature of governmental and institutional assistance to fishery industries, it is nevertheless only one of several forms such assistance may take. Other aid includes technical, biological and economic research; training of fishermen and fishery scientists and administrators; and encouragement and support of improved systems of organization, marketing and distribution. While assistance in such fields has its financial aspect, it is not within the scope of this study to consider it in detail. In contemplating the implications of direct financial aid to fishermen, fish processors and distributors, however, the importance of parallel efforts in these other fields must be borne in mind.

Two other terms which are used extensively in the present study and about which some explanation is required are developed and developing countries. While the general meaning of these terms is well understood, definitions are far less easy to draft. In the context of the present volume, development is taken as having reference to the general economic situation of a country. However, certain countries, developed in the wider economic sense of having well-utilized natural resources and a plentiful supply of capital and skilled labor, may nevertheless be relatively poorly developed in some sectors of their fishery industries. In many western European countries, for example, there are local fisheries which are in an economic sense poorly developed; this can occur even where other sectors of the fishery industry are highly developed. As used in this study, however, developed countries will refer to those countries (in western Europe, North America, South Africa, Japan) where economic and industrial development has reached the stage of self-sustaining economic growth, with well-organized financial and administrative institutions. Developing countries, in contrast, are those where normally external capital is still required for economic development, where industrialization has not proceeded far, and where the financial and administrative machinery is still in a relatively early stage of development.

The following are the principal topics discussed in this study:

1. Objectives of credit policies
   (*a*) in developed countries;
   (*b*) in developing countries.
2. Nature of financial aid in relation to policy objectives.
3. Measurement of the need for financial assistance.
4. Forms of financial assistance to fishery industries.
5. Organization of the supply and distribution of financial aid.
6. Principles of operation and administration of aid schemes.
7. Problem of co-ordination of schemes and assessment of their effectiveness.

Complete elaboration of the above subjects is impossible within the practical limits of a study of this nature. In particular, the discussion on objectives has had perforce to be curtailed. Special attention has been given to principles and problems of organization and administration. It is hoped that the chapters dealing with these aspects will be of particular value to agencies responsible for implementing fishery credit policies, particularly in the developing countries.

1. OBJECTIVES OF FISHERY CREDIT POLICIES IN DEVELOPED COUNTRIES

The introduction of schemes of special financial aid to fishery industries in developed countries is of relatively recent origin. Historically, the fishing fleets of these countries were built up without any outside help from governments or other institutions. Such improvements as were made over the years were instituted by the vessel owners. The greatly increased range and capacity of the fleets eventually led to a vast increase in the production of fish, which helped to satisfy the growing demand for food from ever-increasing urban populations. Hand in hand with the mechanization of vessels and the development of fishing equipment and techniques went improvements in methods of fish processing and storage and in inland transportation and distribution. These developments had, for the most part, been financed from sources provided by industry. In general, the investments made were yielding a handsome return.

In the years between the two world wars there were indications that some sectors of the industry were no longer attracting new investment and that the productivity of certain grounds was rapidly declining and becoming insufficient to support profitably existing fishing capacity. The marked change in the economic climate of fisheries, particularly in western European countries, however, dates from the second world war.

During the years 1939 to 1945, a large number of the more modern fishing vessels were taken over for naval purposes; many were lost or damaged through war action. Approximately 80 percent of the prewar German fleet was thus destroyed. While losses of other combatants were probably relatively lower, they were nevertheless substantial. When, at the end of the war, there was a general demand for capital for reconstruction purposes, the fishery industry could not claim any particular priority in the allocation of available funds.

Conservation problems, which during the interwar years had been given

increasing attention in the management of fisheries in certain waters, particularly in the North Sea, had contributed to a growth in "economic nationalism" among the nations exploiting the fisheries in those waters. After the war, this tendency was accentuated. The extension of exclusive fishing limits in Norwegian and Icelandic waters in recent years has been related to this. Coupled with the extension of limits has been a large increase in the numerical strength of the fleets fishing in northern waters. The tremendous development of the deep-water fishing fleet of the U.S.S.R. in recent years and the introduction of large numbers of factory ships are indicative of the changes that have occurred and are still in progress. The cumulative effect of these changes has been, at least for some countries, a reduction in the productivity of their fisheries and a deterioration in the economic condition of the industry.

The tendency toward lower productivity and, as a result, higher catching costs, has unfortunately encountered, at the stage of consumption, a relatively elastic demand for fish. In the immediate postwar years, demand was less elastic because of the shortage of other foodstuffs, particularly meat. As other commodities became more plentiful, the demand for fish became more elastic. Consumers were more selective and started to resist price increases. Efforts to encourage greater consumption of fish did not always meet with success.

Since, from the demand standpoint, there was little hope for any large increase in fish prices and earnings, it became clear that the main hope of fishermen lay in a reduction in costs of production. In this connection, one must note that besides the need for replacing the considerable amount of equipment destroyed in the war, re-equipment was becoming necessary also in the light of rapid technological changes in the shipbuilding and engineering fields. Welded hulls were coming into favor, diesel and diesel electric engines were being introduced, as well as a wide range of navigational and fish-finding devices. Consideration, in addition, was being given to replacement of conventional vessels by large factory ships and by ships capable of freezing all or part of their catches at sea, so as to meet the problem of fishing on grounds more remote from home ports. In the face of these developments, the days of the old coal-burning vessels, still extensively employed after the war, were clearly numbered. Apart from operating economies, the new diesel-driven vessels had the advantage of attracting the best skippers and crews, a factor of very great importance in determining the success or failure of fishing operations.

The operating advantages of the new types of vessels were obvious. However, their capital cost was very high in relation to that of the vessels built before the war and to the scrap value of the old vessels. With depreciation applied to prewar values, there was no hope of building up the necessary financial reserves to provide replacement at the postwar cost of construction. Consequently, although the need for re-equipment was evident, few enterprises had resources large enough to carry it out. In general, the need for capital had to be met from outside the industry.

It was not easy, however, to meet the capital demands of the fishery industries in this manner. Apart from the heavy competition for capital resources for postwar reconstruction, the fishery industry in developed countries was not an attractive field for development. The reasons for this are not entirely clear. No doubt the inherent hazards of fishing, the dependence on fishery resources of relatively unknown size and habits, as well as the vicissitudes of the weather, have all been contributing factors. There is, moreover, the lack of direct control by owner and investor over the means of production when operations are carried on with hired skippers. No doubt the relatively low profitability of many sectors of the fleet has also been a handicap.

In certain countries, the imbalance between productivity and profitability in the several sectors of the industry was also of significance. Where one sector was doing well, the limited capital available to the industry as a whole tended to be directed there. Therefore, other sectors which actually were in greater need of financing were neglected.

To a greater or lesser extent, these factors have been of relevance in the development of fishery policies in western Europe, North America, and in developed countries elsewhere. Clearly, individual circumstances have varied and the different factors do not apply equally to all countries, nor do they necessarily apply in the same degree to all sectors of the industry within a single country. Nevertheless, they have had the general effect of bringing into being systems of governmental credit to fishery industries. Historically, governments had become involved in fishery administration at a much earlier date, in the fields of biological and economic research, and in international relations. These administrative functions had followed, rather than preceded, the economic development of fisheries, and had come into play to meet specific needs as they arose. The change in the economic climate, in part attributable to them, led, naturally perhaps in the light of historical development,

to new objectives of government administration and organization in the financial field, aimed at (*a*) improving the efficiency of fishery production and distribution and a reduction of costs, in order to increase incomes and profitability, and to build a basis for self-supporting operations; and (*b*) maintaining the contribution of fisheries to national food supplies and the export trade, and increasing the attractiveness of fishery products for domestic and overseas consumers.

The above objectives are basic for the various systems of assistance now being applied to fisheries in developed countries.

The theoretical economic arguments for and against special financial aid to fishery industries have been ably presented by fishery economists.[1] It is not proposed to repeat them here, particularly as the Paris meeting started from acceptance of the fact of the existence of governmental credit aid systems and did not concern itself with the intrinsic economic merits or demerits of such systems. It is perhaps sufficient to point out that objectives fall into two main groups: economic, and socio-political. On purely economic grounds, the arguments for and against special assistance are well balanced. The scales are definitely weighted in favor of special aid, however, when socio-political arguments are added.

There are special objectives of governmental financial aid policies which have applied in certain countries but which cannot be applied generally. Firstly, there is aid for the relief of distress caused by natural disasters, which includes aid to the relief of victims of typhoons in Japan and of hurricane disasters in the United States. Another category of aid pertains to alleviating economic distress in certain local fishing communities. To the extent that both Japanese and United States aid schemes are directed toward re-equipment, they are closely tied to a basic economic objective, although they were introduced for compelling social and political reasons. A third objective (also of socio-political character) is directed toward the improvement of social conditions in an area in order to improve its fishing potential. Fishery policies in South West Africa, where large and prolific fishing grounds off the west coast had remained unexploited because of a lack of shore facilities, for instance, exemplify an objective of this type. A large development program for housing,

[1] See in particular the unpublished paper by J. Wiseman (working paper No. 14 prepared for the Paris meeting), *An examination of arguments for special credit policies for fishing industries*. Also, *The economics of fisheries*, ed. R. Turvey and J. Wiseman. FAO, Rome, 1959.

public utilities and processing plants has been in part instrumental in bringing about an increase in the catch of pilchards from 7,500 tons prior to 1947 to an estimated 850,000 tons in 1961.

One other type of objective which may be mentioned briefly in relation to developed countries is the improvement of ancillary services for fishery industries, for example, harbors, roads and other services. These facilities have, of course, a wider significance in relation to aid to fisheries in the developing countries and will therefore be referred to in greater detail in the following section.

While it is not proposed to describe fully the application of these objectives to the fishery policies of individual developed countries, it may be helpful to select certain examples and briefly outline how financial aid is directed toward the particular objectives with which national fishery policies are mainly concerned.[2]

Norway and Iceland have similar problems, in that fisheries form a very important part (in the latter country the principal part) of economic activity, and that, while the countries are situated close to large fishing grounds, they are largely dependent on foreign markets for the disposal of a good part of their catch. The two main objectives of their fishery policies have thus been (*i*) the conservation of fish stocks; and (*ii*) the promotion of exports by setting up modern, efficient and hygienic freezing and processing plants with financial assistance, and by maintaining high standards of quality for products sent abroad.

Norway has had a further problem in recent years because of the decline of its inshore herring fishery. The latter has been facing rising costs and has been unable to pass on the cost increases to the market. Government financial aid had, therefore, to be granted for relief purposes. Aid is also being accorded to build up a more mobile fishing fleet of larger vessels able to operate in offshore waters, and for the construction of harbors able to accommodate the larger vessels.

Canada and the United States also enjoy proximity to large fishing grounds, and rely on small and medium-sized vessels in carrying out fishing operations. The fishery industry in these countries has been unable to compete with the high and rising level of wages and produc-

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[2] A more detailed description of the problems and policies of fisheries in the various countries of western Europe and North America can be found in the report, *Fishery policies in western Europe and North America*, prepared by OECD, Paris, 1960, and based on confrontation discussions between OECD member countries.

tivity in the economy as a whole. This is particularly true of the groundfish industry in eastern Canada and New England. The producers in both countries must remain competitive with European exporters to North American markets. The objective of financial aid policies, consequently, is to promote the rationalization and modernization of fishing operations.

At the other extreme, there is the British industry, with its distant water, near and middle water, and inshore water sections, which supplies fish primarily for the home market. This industry, especially its distant water and near and middle water sections, is faced with a growing problem as a result of the extension of exclusive fishery limits which cut off large parts of traditional fishing grounds around Iceland and the Faeroes and off the Norwegian coast. The result has been the need to find other grounds. Also following from this are economic and technical problems connected with work on more distant grounds, involving increased travel time for vessels and the additional need to find ways of preserving catches on the long journey back to port. Objectives of financial aid policies, consequently, are as follows:

1. To re-equip the fleets with up-to-date vessels and, where necessary, to adopt modern techniques of catching and preservation, i.e., factory ships and freezer vessels.

2. To maintain supplies of fish and the income of the fishery industry during the transitional period of re-equipment. [3]

This brief analysis of objectives of aid policies in developed countries brings to light an important factor, which the countries concerned will have to consider in the future: it is that much of the need for special aid for fisheries has arisen because of national policies of other nations with which they are competing. National aid schemes, it must be realized, often lead to retaliatory measures on the part of competing countries, defeating basic objectives. Where this is the case, financial resources may be used wastefully and ineffectively. The need for international co-ordination of policies in the exploitation of common fishing

[3] A useful discussion of the objectives of an economic British fishery industry is contained in Section III of the *Report of the Committee of inquiry into the fishing industry*, Cmnd. 1266. HMSO, 1961.

grounds, if only to secure economy in the application of financial aid, is therefore clearly demonstrated.

This, of course, is not the only, and possibly not the most important, factor involved in international co-operation in this field. Further discussion of this problem must be postponed until a subsequent chapter of this study. [4]

[4] See chapter 8, p. 117-120.

2. OBJECTIVES OF FISHERY CREDIT POLICIES IN DEVELOPING COUNTRIES

Unlike the developed countries, where governmental financial aid has been introduced at a relatively late stage of economic development (to meet a sudden and, it is expected, temporary worsening of the economic position of fisheries), financial aid policies in the developing countries have played an essential part in government economic planning. In most of these countries the increase in food production has not kept pace with the increase in population. Where the need for increased supplies of animal protein in the interest of better diets is most pronounced, moreover, production has often been particularly lagging behind.

The immediate problem for governments in these areas - which geographically can be defined as the greater part of Africa, Asia and the Far East, together with most of Central and South America - is to secure an immediate and rapid increase in fish production. This calls for improvements in production, marketing, transport and distribution methods.

The obstacles which impede the rapid and effective development of fisheries in these countries are formidable. In the first place, there is a serious lack of biological and economic knowledge about many of the fisheries. They are at present largely inshore operations. While only in rare instances is there evidence of overexploitation of stocks - in fact, stocks in most of the waters fished appear to be greatly underexploited - the development potential of the fisheries, including the biological considerations involved in increased exploitation and the economics of catching and marketing of vastly larger quantities of fish, have not been seriously studied to date. Moreover, research, particularly in the biological field, is of necessity slow in producing accurate information, and this delay is not readily acceptable to the governments concerned.

Secondly, the fishing craft and gear at present in use are often primitive; they require much labor and have a limited range. While the essential

need is for mechanization of craft and improvements in gear, very often the craft available at present are unsuitable for mechanization. Where the craft have been found suitable and mechanization has been carried out, the increase in productivity has been quite remarkable.

A third problem, which is connected with that of mechanization and the introduction of new methods, is the lack of training and technical knowledge of the bulk of the fishing population. Fishing is by tradition a low-class occupation in these countries; moreover, fishermen are often ridden by superstition, custom and prejudices. To convert subsistence fishing to mechanized fishing for much wider markets is not just a question of supplying the requisite number of outboard motors or similar means of propulsion and effective fishing gear; a serious and time-consuming training and education problem is involved.

A further problem of rapid development of the fisheries arises from the inadequate and primitive marketing and distributive arrangements which persist in many of the developing countries. Marketing is often in the hands of quasi-monopolistic middlemen who, while performing an economic function, are usually thought to conduct it to the general disadvantage of fishermen. A wider marketing and distributive system, which is necessary if increased fish supplies are to be landed, requires changes in organization which may perforce have to be brought about by government intervention.

In brief, therefore, the needs and objectives of fisheries in developing countries are twofold: (*i*) to bring about a rapid increase in fish production in order to improve the intake of animal protein; and (*ii*) to make parallel improvements in fish marketing and distributive facilities, and to set up the appropriate ancillary services that are required to carry out these developments, e.g., shipbuilding facilities, improved landing and harbor facilities, cold stores, fish processing and by-products plants, roads, transport and housing.

In meeting these needs, the greatest difficulty facing the governments concerned is lack of capital. Added to the over-all shortage of capital are the strong competing demands from other sectors of the economy, many of which, whether ancillary to fishing development or not, have equal or greater priority in national development plans.

Governments have at present the unenviable task of channelling the available capital resources into those fields which seem most essential to economic growth and improvement in the living standards of the population. The basic inadequacy of national capital resources to secure any

really rapid economic development in these countries has now been realized by the developed countries, and the organization of external capital supplies is probably the most important aspect of international cooperation in the interests of economic progress in the developing countries.

Training for both fishermen and administrators, and help in carrying out basic research projects, must also be largely international responsibilities. Much work has already been done in these fields, and will be discussed later in this study.

The main reason for the inadequacy of national capital resources in the developing countries is the very low income per caput of the population. As a result, the rate of saving is too low to permit capital accumulation at anything like the rate needed for economic development. A higher rate of capital accumulation is required, as well as the correct allocation of capital resources among competing demands. Since production in many sectors of the economy is for subsistence only, there are no highly organized credit structures. Much credit, therefore, is static in the sense of representing working capital for current operations using existing techniques, often supplied by monopolistic middlemen as one of their many functions.

Governments in developing countries, therefore, must have as an objective of financial policy the stimulation of growth in those sectors of the economy where the opportunities for realizing the aim of "self-sustained" growth appear brightest. There are a number of reasons why fisheries may be considered a sector of this kind. These have been fully discussed elsewhere[1] and will therefore not be repeated here at length.

There are two reasons for believing that self-sustained growth may be realized through capital investment in fisheries: (*i*) with the introduction of improved fishing equipment and increased emphasis on technical training, the range of fishing operations can be extended beyond local waters and more productive grounds can be exploited; and (*ii*) with the provision of new and better facilities in the marketing sector, costs of distribution can be lowered and consumption expanded. In many places fishermen have to deal with one buyer or with small organized groups of middlemen who are the only outlets for their products and the only source of credit and other ancillary services. The

[1] See *Economics of fisheries*, ed. R. Turvey and J. Wiseman, FAO, Rome, 1957. Chapter V. *Special problems of fisheries in poor countries*, by Kirby and Szczepanik.

imperfection of the market and the ignorance and lack of education of the fishermen have tended to enhance the economic power of the middleman. The situation has been accentuated by the circumstance that in spite of high returns, entry of new elements into the middlemen business is not easy, largely because the activities of the middlemen are as a rule concentrated in the hands of particular social or ethnic groups. Policy measures to improve the marketing system and to widen the credit facilities available to fishermen have, therefore, to face the problem of dealing with the middleman problem as a whole. Attempts to deal with only one aspect of the problem, for example, by offering alternative credit facilities, are likely to be defeated by the control of the middleman over other ancillary services, making it inexpedient or even impossible for the fisherman to disregard the credit offered by the middleman. [2]

Objectives in the marketing field must therefore be broadly based on the provision of alternative facilities of all kinds. This may be achieved by the setting up of fishermen's co-operatives or by the direct provision of services by government agencies. Difficulties arise here because of lack of requisite administrative and managerial skills, and because of the danger that the new facilities eventually might be taken over by the middlemen themselves. The competition of newly established organizations may also be ineffective, not only because of failure to include ancillary services but also because credit which is normally vital for the low-income fishing communities is not provided on a continuing basis. Lack of administrative skills by inexperienced management personnel makes credit administration an unsatisfactory activity for fishermen's co-operatives in the early stages. Subsidized public credit may therefore be necessary to break the middleman's control.

To sum up, therefore, the objectives of financial aid policies in developing countries can be stated as rather wider in scope than those in developed countries.

The economic objectives are similar: (*i*) to increase productivity; and (*ii*) to reduce the cost of operations in all sectors of the industry. The scope of improvement possible, however, is much greater in developing countries because of the possibility of opening up untapped resources

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[2] A fuller discussion of the problems of marketing can be found in *Fishermen's co-operatives in the Indo-Pacific region*, by E. F. Szczepanik (Report of the FAO Training Center in Fishing Co-operatives and Administration, Vol. II). FAO, Rome, 1958.

for exploitation through the employment of improved equipment and techniques.

Social and political objectives are particularly significant, not only to safeguard the social and economic welfare of the fishing communities as in developed countries, but to increase earnings and improve the standard of living of the fishermen well above the present low levels and, moreover, to raise the nutritional level of the whole community by making available additional supplies of animal protein. Efforts to free the fishermen from the very oppressive burden of debt with which most of them are saddled under existing marketing and financial systems will have to be part of any program, at least during the first phase of its application.

Over and above direct aid to the fisheries, there are of course the general objectives of national economic growth in developing countries: the building of public works, the construction of houses and factories, the improvement and development of internal transport systems (roads and railways), all of which are of significance in relation to the more limited sphere of fisheries. In certain circumstances, they may be of direct and vital concern to the development of the fisheries.

3. IMPLICATIONS OF POLICY OBJECTIVES ON THE NATURE AND SCOPE OF CREDIT ASSISTANCE

Developed countries

The objectives of governmental assistance to fishery industries in developed countries, as described in chapter I, are basically formulated with regard to the special economic difficulties of a primary producing industry in a developed economy, arising largely as a result of natural, biological and political factors outside the control of the entrepreneurs. To overcome these difficulties, it is necessary to re-equip the catching, processing and distributive sectors of the industry, to improve efficiency and reduce costs, by making available financial assistance not forthcoming through the usual channels of capital supply.

The " rescue " operations thus embarked upon by the governments of these countries, while introduced to meet special needs, have nevertheless been designed to fit as easily as possible into the general financial and administrative framework of the economy. Although the need for special credit facilities has been brought about by the unwillingness or inability of existing financial institutions to make capital available on reasonable terms, the special aid schemes have in general confined themselves to applying the requisite capital. They have not attempted to interfere in the operation of fishery enterprises or in the contractual arrangements for re-equipment between shipbuilders and vessel owners. In many developed countries with important fishery industries, the climate of opinion is strongly against governmental interference in business matters, and even within the fishery industries there are important elements opposed to any suggestion of governmental financial aid - although worsening economic conditions and continued capital stringency may eventually bring about a modification of this attitude.

There are also strong influences against too extensive aid by governments, not only where the political climate puts a brake on interference

with industry, but also because aid to one industry, for whatever compelling reasons it can be justified, inevitably brings claims for similar aid from other industries. In most developed countries in which special aid to fishery industries has been introduced, governments have been at great pains to justify their actions in relation to the specific needs of the fishery industry and the special conditions in which it operates. It is also for this reason that aid is often restricted to the fishing sector of the industry. In some countries it is limited to certain categories of producers. While the special difficulties of fishermen using "common resource" stocks subject to the vagaries of nature are generally recognized, financial assistance toward the cost of setting up a processing factory or store, or toward the improvement of wholesale or retail premises, is far less easy to defend against the claims of manufacturers and distributors of other commodities for similar assistance.

In justifying special aid within the general economic framework, governments have on a number of occasions had recourse to committees of inquiry to advise them on policy. The latest of such committees to be set up to consider the position of the industry in the United Kingdom (the Fleck Committee), in a recent report, concluded the following on the subject of aid.

> "Our consideration of the long-term prospects of the fishing industry has led us to the conclusion that the fleet as a whole is unlikely to attain economic operation at its present level and with its present structure, but that with the modernization of its vessels and the rationalization of its structure - including an increasingly close connexion between the catching and the processing and distributive sides of the industry - there is reasonable hope of its future prosperity. These measures have begun; but they have not been carried far enough, and the fishing industry in many of its aspects is lagging behind many other industries in the adoption of modern equipment, methods and forms of organization. The fleet is moreover facing difficulties which increase the urgency of re-equipping it with vessels more suited to present conditions, while at the same time making it the less likely to continue at its present level of catching while the necessary measures are taken. The form of the fleet must, we think, be left to the commercial judgement of its owners; but we believe that in order to exercise their judgement effectively they must be assured of a certain minimum level of financial support for the next ten years, and

> that... the same degree of support should be afforded to all vessels. We do not think that support should be guaranteed for a longer period than ten years without a reappraisal of the situation, nor that a shorter period would be enough to effect the improvements we hope to see in the industry. If our forecast proves too optimistic, and the fleet is still dependent on subsidies, it will be for the Government of the day to decide whether general social and economic considerations justify a policy of long-term support for the fishing industry such as that accorded to agriculture. We recommend therefore that the principle of assistance to all sections of the white fish and herring fleet at an assured minimum level for the next ten years should be accepted."[1]

The British Government, in a White Paper,[2] has generally accepted these recommendations for aid in the form of grants, operational subsidies and loans over the next ten years, but points out that with the proposed financial aid " the trawler industry should be able to take the necessary action to adjust its operations to meet the new conditions, so that, by the end of ten years, it can become reasonably strong and prosperous without Government financial aid."

This emphasis on the temporary nature of financial assistance is a very typical feature of aid schemes in developed countries. The postwar history of credit aid in the Federal Republic of Germany shows that after the currency reform of June 1948 the trawler owners were unable to meet the costs of fleet reconstruction and were granted financial aid and tax relief. As reconstruction proceeded, the amount of government aid in the form of loans and subsidized interest rates was reduced. Aid is now no longer granted to the conventional deep-sea fishing but only to the small deep-sea and cutter fishery, and for factory vessels.

Aid policies in developed countries are thus based strictly on need and are essentially considered as temporary expedients. A serious practical administrative problem arises in striking a balance between the interests of the economy as a whole, in keeping special aid of this kind as limited in nature and extent as possible, and the need of the industry to have some guaranteed minimum period and amount of aid, so that it may proceed with confidence to carry out the particular re-equipment or reorgani-

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[1] *Op. cit.*, p. 9.
[2] *The fishing industry*, Cmnd. 1453, HMSO, August 1961.

zation that the aid is designed to encourage. Basically, the reason for giving temporary aid is to create a viable industry which can hold its own in the national economy and whose capital needs could eventually be supplied from normal commercial sources.

Unfortunately, the application of this basic philosophy has, within recent years, been hampered by various factors. An increase in the application of scientific aids to fisheries and the ever-increasing pressure to work new and more distant fishing grounds have increased the speed, cost and complexity of technological changes in the fishing sector. This has meant that fleets, relatively modern in terms of date of construction, face the problem of re-equipment at very heavy capital cost; aid schemes which may well have largely accomplished their original purposes may, therefore, have to be extended to cover new needs. In the United Kingdom, for example, ten-year operational subsidies, grants and loans introduced in the early 1950s to assist in the rebuilding of near and middle-water vessels (up to 140 feet in length) are now to be extended for a further period of ten years, from 1962, and are also to cover the larger distant-water vessels which have recently encountered serious economic difficulties. Loans may be granted for periods of up to 20 years for new vessel construction, so that aid extending to the 1990s can scarcely be described as " temporary. " In the Federal Republic of Germany, where aid for larger vessels has been discontinued, a renewed plea for government aid to meet the rapidly changing conditions has been made by the trawler owners' organization. It is claimed that vessels built prior to 1955 are already obsolescent, that large stern-trawling ships of greater range are now required, and that in the short period that has elapsed since the reconstruction of the fleet, it has not been possible to build up funds for the replacement of the ships, particularly as the new units required are far more costly than the vessels which they are meant to replace.

A further factor militating against the strict application of the philosophy of the temporary nature of aid is the unfortunate tendency of aid recipients to consider such assistance as a permanent factor in their operations. The duration of assistance is largely influenced by the nature of the objectives; there is a natural tendency to discover new objectives for assistance as soon as the original objectives have been attained. It is indisputable that economic conditions in the major fisheries operated by the principal developed countries have over the past few years deteriorated to an extent that has made the discontinuance of most existing aid schemes unfeasible at the present time. Unless there is a radical change in political attitudes

to international co-operation in this field, it seems likely that aid schemes in most developed countries will have to be recognized as " quasi-permanent " rather than " temporary. "

One important type of aid in most developed countries, which has of necessity assumed more of a " quasi-permanent " nature, is that extended to the small-scale, normally coastal, fishery. This sector, in most instances, is not able to take advantage of the commercial channels of finance, because of its small-scale independent owner type of operation. In principle, it may be said that assistance to small independent fishermen tends to be of a more or less permanent character, since it is unlikely that social and economic conditions in this sector will change drastically. In the United Kingdom, aid to inshore fishermen began on a limited scale in 1945 and is now scheduled to continue into the 1970s. In Western Germany, aid has been continued for smaller fishermen, although discontinued for larger fishing operations. In most other western European countries, too, coastal fishermen receive special consideration in respect of financial aid. The considerations are largely social (the social costs of coastal depopulation - or, alternatively, of transference of new industries to often remote coastal areas - are in most cases clearly far in excess of the cost of financial aid), and the aim is to enable the coastal fisherman to carry on his occupation and mode of life with reasonable economic success.

It is generally found in developed countries that aid schemes are directed at specific rather than general objectives, for example, to assist in the building of a new type of fleet unit, as in Norway; or to encourage modernization of certain out-of-date sections of the fleet, as in the United Kingdom. It is becoming increasingly common to find loan assistance available only to those organizations or individuals within a sector who are able to demonstrate to the satisfaction of the lending agency that they have been unable to raise the necessary funds from normal commercial sources on reasonable terms. Only in the small-scale coastal fishery is there a tendency to make general financial aid available in the form of working capital, and often this is linked to encouraging co-operative organization by applying the aid to co-operative societies rather than to individual fishermen. The use of aid by the sectors of the industry concerned is generally closely controlled, to ensure that the objectives are met. Success in achieving objectives thus has, as a prerequisite, basic agreement between the government and the industry on objectives and on methods of attaining them. Disagreement will inevitably lead to failure, since in a

private enterprise economy the industry is free to decide whether or not to use the facilities, once they have been created.

Developing countries

The principal objectives of financial assistance policies in developing countries, as described in chapter 2, are related to the social welfare of the fisherman, improvement in the economic conditions of the fishing community, and improvement in the nutritional levels of the population. In most developing countries there is a chronic shortage of capital, both in the economy as a whole and in the fishing communities. As already pointed out, the absence of capital accumulation by the fishermen has contributed to their exploitation in these countries by professional moneylenders, so that an important task in aid schemes is to assist the fishermen to free themselves from oppressive debt burdens. The progress of general economic development has led to the creation of fishing companies and the strengthening of the position of private noninstitutional lenders. The small independent fisherman's position in some places has deteriorated to a condition resembling peonage.

The general shortage of capital has meant that the fishery industries have had to take their place side by side with the many other industries with claims for assistance from the limited funds available. Although it is generally recognized that a build-up of fishery production can yield a valuable and rapid increase in protein supplies for the population, the special hazards of fishing operations, the lack of knowledge of the fishing potential, and the generally backward social and economic condition of the fishing communities in many developing countries have tended to deter governments from undertaking large capital investment in fisheries. National prestige has also had an influence in this matter; there has been a tendency in some developing countries to consider investment in a steel mill or an airline more important than an investment aimed at improving agricultural and food production methods. Economic progress may, in fact, be retarded by devoting too many resources to types of industrialization for which a country is not quite prepared or suited. Nevertheless, the need for government support is much more compelling in developing countries than elsewhere, because of (*a*) serious nutritional problems and lack of alternative opportunities to develop other protein food resources as quickly and as economically as fisheries; and (*b*) because of

low living standards and a lack of alternative employment for fishermen.

Financial assistance to fisheries in the developing countries must clearly be related to economic development policies in general. Scarce capital resources, a considerable proportion of which are at present obtained from abroad, have to be channelled directly or indirectly into the types of investment favored by the government. Such aid as is allocated to fishery development is often directed at the small independent fisherman, and thus tends to become permanent rather than temporary in character. A long-term fishery industry development program in which credit assistance plays a vital part, involves the following features.

1. Introduction of improved fishing vessels and methods and the study of the potential of the fishery and the possibility of its extension and development.
2. Training of fishermen in the use of new vessels, methods and gear.
3. Improvement of transportation of fish by sea and land.
4. Establishment of processing, ice and cold storage facilities on shore.
5. Improvement of marketing by encouraging co-operative enterprise, with the objectives, among other things, of eliminating heavy debt burdens and breaking monopolistic buying practices.

Improvements in harbor and dock facilities, road and rail communications and housing, which are of a more general infrastructure nature, are also vital to the success of a fishery development program. An exhaustive survey of the problems of economic aid in developing countries has recently been prepared by F. Benham.[3] In this study, the author rightly emphasizes the importance of factors other than financial investment in economic growth. He points out that the rate of advance also depends on the character and ability of the people concerned, especially on their capacity to learn and apply improved methods; the acumen of entrepreneurs; the creation of adequate incentives to encourage effort and capital investment; on general economic and social policy and customs; and on the ability and integrity of government administrators. All these factors are also of importance in the more limited field of fishery industries, and must not be overlooked when considering the more specialized problems of credit schemes.

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[3] *Economic aid in underdeveloped countries*, by F. Benham, Oxford University Press, 1961.

4. THE MEASUREMENT OF NEEDS

Before committing themselves to giving financial assistance to fishery industries, investors, whether national or international credit agencies or private lenders, will wish to satisfy themselves that the projects for which they are asked to make funds available are economically and technically sound. In developed countries, much research work has been done on the biological and economic aspects of fisheries. In the present conditions of intensive competition on the main fishing grounds, it cannot be said that the scale of this work is yet sufficiently great or given sufficient urgency in the national scientific programs of the countries concerned. The dangers of overexploitation of fishing grounds are generally recognized. Indeed, the needs of the fishing industries of developed countries for special financial assistance are not infrequently related to this factor.

Developing countries should learn from the experience of many developed countries that it is fatal to postpone consideration of conservation needs until the signs of overexploitation have appeared. Much capital may be wasted in equipping an industry to fish new grounds if the information about the extent and resources of these grounds is incorrect and they turn out to be far less productive than anticipated. Unregulated international competition on such grounds is also likely to be dangerous. Steps should, therefore, be taken by countries with developing fishery industries to secure the co-operation of other countries working the grounds on which they propose to operate. Further discussion on the practical ways in which such co-operation might come about is postponed until the final chapter of this study.

In developed countries, biological techniques are well advanced. It remains only to impress upon governmental and other bodies responsible for basic biological research the need for an urgent and substantial increase in the amount of resources applied to fishery research. Developing countries, on the other hand, must look to outside assistance in carrying out basic scientific studies, which by the very nature of the problems with which they are concerned, have to extend over considerably longer periods. More international assistance in carrying out resource surveys is required.

This turns again on the need to impress upon governments contributing to international agencies the vital need for the work of survey and investigation to be carried out quickly and effectively, so that the proposed capital investment can be most profitably and efficiently applied. The work being done by FAO on behalf of the United Nations Special Fund sets the pattern for studies of this type; it remains to increase the rate at which such projects can be implemented.

A welcome indication of further help in this direction is contained in a recent announcement from the World Bank that it is establishing a new Development Advisory Service. The service is designed to provide expert economic and financial advice to governments of developing countries, in relation to the preparation and execution of development programs. The Bank has made clear its intention to develop this policy of enlarging its technical assistance and training activities.

On the related question of economic study and research, the needs are similarly urgent. Economic literature in developed countries has not in the past given as much attention to the problems of fishery industries as they would seem to merit. Neither has the industry, with a few exceptions, provided its own economic and statistical services to the extent that other major industries have done. The reasons for this may lie in the traditionally individualistic nature of fishermen. Even with growing emphasis on large-scale organization in some sectors of the fleet, this attitude has not entirely disappeared. Skippers are still unwilling to disclose details of their fishing results. The reluctance to provide information permeates from the individual catching units through the larger fishery enterprises to the trade organizations. The reasons may be understood but the consequences for the industry, in a period of difficulty and capital stringency, are serious, in that the private investor may well be reluctant to invest in the industry, and governmental or institutional special aid may be delayed or inadequate or wrongly directed, by reason of the lack of detailed and accurate economic and statistical information.

Some action has been taken on an international scale to improve statistical information on fisheries, particularly through a meeting held at Edinburgh, Scotland, in September 1959, organized by FAO and cosponsored by the International Council for the Exploration of the Sea and the International Commission for the Northwest Atlantic Fisheries.[1]

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[1] *Expert meeting on fishery statistics in the North Atlantic area, Edinburgh, 22-30 September 1959.*

In a paper prepared for discussion at this meeting, it was pointed out that in order for an international body to be able to give adequate assistance to national administrations in less developed countries in the development of fisheries, they must assemble statistics on catches, landings, composition of landings, disposition, processing, trade, domestic consumption, prices, costs, etc. While such information is not usually available for developing countries, similar material from developed countries with adequate fishing statistical systems may provide background material for the assessment of problems elsewhere.[2]

While the technique of " extrapolation " of experience may be preferable to working on problems without any such assistance, it raises difficult statistical problems of its own in deciding with what degree of accuracy results can be " transferred " from one country to another. In the long run, it would seem that the objective must be full international co-operation in the supply of accurate and up-to-date information from all countries, if necessary by a substantial increase in external aid through assignment of statistical experts to developing countries.

In another paper prepared for the Edinburgh meeting, Professor Gerhardsen emphasized the place of statistical knowledge in the growing governmental initiative: " More and more, governments tend to interfere in the industry, and to aid and support it;... Credit schemes may be launched, and credits and subsidies may be, and have often been, granted without statistics... for the assessment of the effect of such activities, statistics are essential... "[3]

Another field in which international discussion has recently been held is that of inquiries into the costs and earnings of fishery enterprises. At a meeting organized by FAO, held in London in September 1958, a most useful exchange of experience and views took place.[4] Technical problems of definition of terms, collection and analysis were discussed. In particular, the problem of securing accurate information from the small-scale fishery enterprises, operated with inadequate or sometimes nonexistent business records was considered. Attempts have been made in some countries to secure improvements in account-keeping by specifying a

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[2] L.P.D. Gertenbach, *Fishery statistical requirements of FAO.*
[3] Professor G. M. Gerhardsen, *The use of fishery statistics by government and business in northwest Europe.*
[4] *FAO technical meeting on costs and earnings of fishing enterprises, London, 8-13 September 1958.*

simple, standard form of accounts which can be kept by the smaller fishermen, and further reference will be made to this later in this study in chapter 7, dealing with the administration of aid schemes and the keeping of records by aid recipients as a condition of assistance.

While improvements in the field of general statistics and in costs and earnings statistics have been achieved, it is still true that agencies responsible for policy on financial aid to fisheries have to base their decisions largely on common sense and professional knowledge and experience. No technique of economic analysis has yet been evolved to deal with the intractable problem of forecasting in relation to a "common resource," subject to the vagaries of nature, and there seems little prospect of it being developed in the foreseeable future. That this is unfortunate goes without saying, for investment decisions, whether by a credit agency, a large-scale fishery enterprise or a small individual fisherman are in their nature mainly long-term, expensive, and difficult to reverse once they have been taken. A decision by a trawler-owning company to build a new deep-sea vessel costing £300,000 represents a long-term investment extending over perhaps twenty years. If government credit aid is given for these purposes, both the government and the company have committed themselves to this investment and, once the ship is built, the capital can only be amortized over its full earning life. Mistakes on this scale cannot easily be remedied; early obsolescence may mean that the capital invested can never be fully recovered, and further government aid may be necessary to salvage the enterprise and enable it to build once again on different lines. Similar considerations will arise, on a smaller scale, if an inshore fisherman builds a vessel which is not designed so as to be able to meet the changing needs of the fishery he has traditionally carried on. He cannot dispose of the vessel and build again without further assistance.

The responsibilities of the fishery administrators and economists are clearly onerous, and particularly so in advising on fishery development in developing countries, where capital resources are extremely limited and where mistakes in the application of such resources cannot be afforded. There is not only a waste of capital involved in fishery development which is proved to be unsound, but failure may well discourage governments from making a fresh investment in fisheries, whatever may be the merits of further proposals for development.

In developed countries, too, the need for investment guidance to entrepreneurs in the present uncertain state of many fisheries should be more widely appreciated, particularly where governments are actively engaged

in fostering re-equipment and development by giving financial assistance. In the White Paper recently issued by the British Government [5] it is stated, in relation to distant water vessels, that "the Government accept that assistance by way of grants and, in suitable cases, loans should be provided for the replacement of a few of the older, prewar vessels, and for the construction of a limited number of vessels by newcomers to the industry. It is also recognized that, after a period of experimentation, the industry may find it necessary to build a proportion of new types of vessels which are likely to cost considerably more than the conventional type of trawler. When that time comes, therefore, the Government will be prepared to consider whether and how financial assistance should be given for the building of any such newer types of vessels, perhaps by giving grants and loans on part of the excess cost of such vessels over that of conventional trawlers. Similarly, the cost of providing additional equipment, such as freezing equipment, for conventional trawlers might also be assisted. In the meantime, the Government would help the industry to find the best type of vessel to suit the new conditions by providing grants toward the building of a limited number of experimental prototype vessels."

Policy statements of this kind are indispensable to industry development under present circumstances. It is clearly indicated that certain aid will be available for a limited degree of replacement of old vessels. The only criticism that can be made is that, through failure to specify the amount and timing of aid for new types of vessels, owners may be tempted to take the aid offered for the replacement of old vessels by new vessels of conventional types, when their long-term interests would be better served by waiting until new types of vessels have been proved successful by experiment.

In the sphere of marketing, too, it is desirable for governments and businessmen to recognize the implications of credit aid and investment. The recent crisis in the fish-meal industry, it is commonly agreed, was related, at least in part, to uncontrolled expansion in developing countries. Experience has shown in this case that in a development program, a proper balance is necessary between production and marketing. If it is lacking, the objectives of development can be defeated and can give rise to serious difficulties on an international plane.

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[5] *Op. cit.*, p. 18.

5. THE FORM OF ASSISTANCE

Assistance schemes currently in operation in developed and developing countries are extremely diverse in their nature and form. This follows naturally from the equally wide differences in the objectives of fishery aid policies.

Where policy objectives are of a general nature, the assistance too is general in form. Specific and limited policy objectives, on the other hand, normally give rise to more specific and narrowly directed forms and targets of assistance. Disaster aid, such as is provided by Japan and other Far Eastern countries and the United States, is perhaps the most specific of all. Typhoon " Mary, " which hit Hong Kong in June 1960, damaged over 120 fishing craft beyond repair and washed out oyster beds. Rehabilitation loans and grants for the purchase of new boats and gear were quickly made available to the fishermen affected, and fishing operations were soon resumed.

In the majority of countries in which financial assistance is given to fisheries, aid is directed to specific rather than general purposes. It is often found that within one country there are a number of specific schemes directed at aiding various sectors of the fishery industry. In these cases, the co-ordination with basic policy aims of schemes in separate sectors is important. Balanced progress toward objectives must be secured. In certain circumstances, this may require a deliberate curtailment of aid in some sectors. Co-ordination may also be secured by a deliberate timing of the availability of aid in the various sectors. For example, financial aid toward the cost of re-equipment of a part of the British trawler fleet with part- or whole-freezing vessels is planned to await the results of the application of research grant aid for the construction of a limited number of prototype vessels of this kind. In due course, loan aid will be available to contribute, if required, toward the cost of additional shore-based cold stores needed if a large increase in landings of sea-frozen fish takes place.

In a number of countries, aid directed in specific forms to certain sectors is only available within those sectors to persons who are able to demonstrate a need. In the scheme of government loan assistance in the United States, proof of inability to obtain alternative financing is a general condition for eligibility for assistance. In the United Kingdom too, a similar rule has applied for some time as regards loans to limited companies for the construction or acquisition of fish-processing plants. It is proposed to apply it in the future to loans for fishing vessels as well.

Funds available for fishery aid purposes are limited and it is desirable to allot them to those applicants most in need of assistance. This does, however, raise some difficulty in the application of aid policies. A choice has to be made with regard to the size and character of loans, so that desired objectives can be achieved. If a decision is made to benefit as many individual operators as possible, then the average size of a loan is likely to be small; in fact, it may be too small for the purposes of the scheme, particularly if the construction of large facilities is involved. Again, a balance must be struck in arriving at a policy decision. The aid must be sufficient to encourage operators to carry out the re-equipment or construction required, but must not be so large in amount that individual needs are too generously covered and, in consequence, an inadequate number of projects are carried out. The opposite danger must also be guarded against, that aid is too thinly spread and the industry is discouraged from carrying out the desired developments.

In developing countries, it may be necessary initially to keep loans small, even if this means a deliberate choice of small-scale objectives in the short term, because of the inability of beneficiaries to handle large sums. Only at a certain stage of organizational development may larger-scale objectives be adequately safeguarded in such countries. In Uganda, for example, where loans are made to African lake fishermen, nearly every loan is either for an outboard engine or a larger and more seaworthy canoe and a new fleet of nets. In the course of years, small dugout canoes will gradually be replaced by properly built boats with outboard engines, allowing longer and faster trips and yielding better catches.

In private enterprise economies, the fishery industry must by and large support the objectives and methods of financial aid. Operators cannot be forced to take advantage of the assistance offered, and decisions on whether or not to carry out development and construction projects re-

main with the industry. Assistance which in the industry's view is inadequate or wrongly formulated is likely to be ignored, and its objectives will not be achieved. Governments may be tempted to use financial assistance to enforce a particular policy which, in the view of their experts, is technically desirable. Where, however, the decision to proceed or not still rests with the operator, the extent to which an aid program can influence his decision is doubtful. It is more likely to be a stronger influence in developing countries than in countries with a well-developed fishery industry, where the operators are more highly qualified technically, and where financial aid is only one of a number of considerations in the formulation of capital expenditure programs.

In a planned economy, it is possible for governments to use financial assistance in a more positive sense as an integral part of their planning machinery. The experience in India, during the series of five-year plans, indicates how a development program based on the phasing of financial aid, and the deliberate selection of sectors to receive aid, can operate. The mechanization of fishing craft and development of designs for fishing craft suitable for different sections of the coast were included in the first plan. This resulted in the mechanization of about 650 boats, mostly in Bombay. Since the start of the second plan, another 850 boats have been mechanized and these have been far more widely distributed geographically. Nine centers for training in use and maintenance of vessels have been set up. During the third plan (1961-65), it is proposed to expand the mechanization program to include 4,000 vessels, to explore new fishing grounds, and to exploit marine resources through co-operative as well as private fishery companies. Development of fishing harbors will also be carried out, and refrigerated rail cars and insulated lorries will be provided. A big and phased development of inland fisheries has also been part of the plans.

The main purposes of aid

A very wide range of purposes is covered by the schemes at present in operation, because of differences in objectives, the stage of development of fisheries, the historical course of events within the industry, varied social and economic organization of the various countries, and many other reasons. The purposes can, however, be classifed into certain main groups.

Building or acquisition of new fishing vessels

Schemes cover some or all of the types of vessels currently in operation in a fishery, including trawlers, drifters, luggers, cutters, seiners, purse seiners, liners and many others, and in some cases encourage the construction and development of new types. Among new types of vessels assisted under financial aid schemes are stern trawlers, factory ships, mother ships and ships designed for freezing at sea a part or the whole of their catch. Many countries confine aid to coastal fisheries, where capital resources are generally lacking and where re-equipment and modernization often yield large returns in increased productivity and incomes. Aid for the construction of new fishing vessels is often applied within a country to specific sectors of the catching industry or to certain types of vessels within a sector.

In the United Kingdom, for example, aid is not yet available toward the cost of building distant water vessels (i.e., those of over 140 feet registered length), although legislation is now being drawn up to extend the scope of aid to include these larger ships. Should it be enacted, it could mean that aid schemes for new vessels in the United Kingdom would extend throughout the whole catching industry. In the Federal Republic of Germany, on the other hand, aid was at one time available for construction of the larger vessels, but has now been discontinued. Present assistance applies only to the smaller classes of vessels, such as cutters and other coastal craft, and vessels of unorthodox design, such as factory and freezing ships. In Greece, too, extensive aid has been given to freezer vessels to operate off the north and northwest African coasts, to such an extent that fears have recently been expressed among Greek interests that development may be proceeding too far and that the disposal of the rapidly increasing landings of frozen fish may give rise to difficulties. It is of interest to note that in Sierra Leone, which has made rapid strides in fleet development, small 28-foot boats have been supplied to the Sierra Leone Fisheries Development and Research Unit from sources in Ghana.

Acquisition of second-hand vessels

Aid for this purpose has not been extensive and is not favored by many countries. The principal objections to giving aid for second-hand vessels are that the generally limited aid facilities are better employed in

the construction of modern vessels, with up-to-date equipment, rather than in facilitating the transfer of ownership of existing vessels from one fisherman to another. It is claimed, probably with much justification, that the effect of financial aid for such transactions is simply to inflate the second-hand value of existing vessels, so that the whole benefit falls into the hands of the sellers, who may often be leaving the industry for other occupations. These objections are significant and have had the effect of discouraging aid schemes for this purpose. It can be argued, however, that strictly limited amounts of aid should be made available for the purchase of second-hand boats to meet the difficulties of the smaller working fisherman, with very limited cash resources, who is unable to meet his initial contribution toward the cost of a new vessel, even with the financial assistance offered for that purpose. Whether it is desirable, on broad policy considerations, to go even so far in giving aid for second-hand vessels, is extremely doubtful.

Improvement or conversion of existing vessels

Typically, aid for the improvement of existing vessels is directed at modernizing the propulsion machinery and crew accommodation of the larger types of fishing vessels. In most vessels the life of the hull is far longer than that of the propulsion machinery, particularly if it has been well maintained. At the same time, technical developments in marine engines have proceeded very rapidly in recent years, so that older propulsion methods have tended to become uneconomic, and vessels equipped with them have been unable to compete effectively with the newer vessels. The older trawler fleets were made up of coal-burning vessels. With the newer developments in oil-firing and marine diesel engines, coal-fired steam vessels have become increasingly uneconomic. Rapidly rising coal prices in many countries have hastened this process. Financial aid toward conversion of the larger vessels has been directed mainly at replacing coal-fired by oil-fired boilers or by diesel engines. During these conversions, the opportunity has been taken to replace the often deplorable living conditions of the crew in these older boats with modern accommodation and sanitary arrangements. These changes, naturally, have played a large part in securing good crews for the improved vessels and meeting the competition of shore industries for the labor available at fishing ports.

The principal limiting factors in the extension of this type of aid are technical. The replacement of steam boilers by diesel engines of considerably less weight gives rise to difficult problems of stability and weight distribution, which increase with the size of the vessel. It is also found that many vessels require so much repair work and plate replacement before new engines can be installed, that the proposition becomes uneconomic when compared with the alternative of scrapping the vessel and building a new one with financial assistance.

Engining and re-engining of fishing vessels

For the larger types of vessels in developed countries, re-engining generally involves a change in the type of propulsion machinery. For the smaller vessels in the coastal fisheries, re-engining is required far more often, both because of the less skillful handling the engine receives and because the engines are, in general, more exposed to the elements. In developing countries, the main requirement is the initial engining of fishing vessels, to improve the range and yield of the vessels and to increase the productivity and income of the fishermen. Typically, therefore, in developed fisheries the schemes provide aid for the replacement of engines in coastal fishing vessels, often by the same type of engine but of modern design - petrol, petrol/paraffin or diesel. In the developing fisheries, however, the main emphasis is on initial mechanization. Enormous strides have been taken in the countries of west Africa, southeast Asia, the Far East and the islands in the Indian Ocean in equipping traditional hulls with outboard or inboard motors.

Fishing gear and equipment (other than engines)

Assistance toward the cost of acquisition of improved gear and other equipment, is also directed mainly at the working fishermen using smaller coastal craft. To the extent that equipment of this kind is fitted to new vessels during construction, it is normally, for aid purposes, included in the total building costs of the new vessel.

Financial aid for fishing gear is often limited in scope. A general aid scheme directed at assisting the replacement of lost fishing gear is open

to abuse by unscrupulous fishermen, who might well be tempted to jettison old and worn gear and claim aid in its replacement on return to port. In the United Kingdom, loan assistance toward the cost of gear for white fishing is available only for (*a*) gear required as part of the initial equipment of a new vessel; (*b*) gear required as initial equipment as a consequence of a changeover to a new type of fishing; and (*c*) new gear made necessary as a result of statutory changes in net mesh sizes.

Other aid to fishermen

There are in operation many schemes giving aid to fishermen for purposes other than for vessels and gear. The variety is extremely wide and includes such diverse purposes as the improvement of housing facilities, development of fish culture and fish ponds, setting up vessel repair shops and slipways (Norway), paying vessel insurance (British Guiana), fish price support (Norway), management and accounting services (Mexico), the freeing of fishermen from debt burdens and the supply of working capital (often through co-operative societies), as well as aid to fishing boatbuilders for the purchase of tools and equipment (Nova Scotia).

Loans for housing facilities and social amenities for fishing communities are given in various forms in South Africa, Venezuela, Quebec, Ceylon, India, Hong Kong, Greece and Spain. Fish culture and pond improvement are assisted in Sweden, Greece, Jamaica, Japan, Malaya, the Philippines and British Guiana.

Construction and improvement of fish-processing facilities

Financial aid for these purposes is normally directed toward the capital cost of construction of quick-freezing plants, canneries, smoking and curing plants, cold stores, fish meal factories, ice plants, and manufacture of boxes and ancillary supplies for the industry. While the need to insure the development of processing facilities in step with increases in the productivity of the catching sector is generally appreciated, the giving of financial aid for such purposes is not so widespread as for fishing vessels.

The experience of Ghana over the past few years indicates the wisdom of careful planning of shore developments to keep pace with catching progress. Ghana is proceeding rapidly with the mechanization of its large fishing fleet and is now in the process of increasing substantially its deep-sea fishing fleet with vessels built abroad. Fish marketing experts from FAO have advised on the shore installations and marketing changes necessary to deal with the anticipated increase in landings. The Government of Ghana has now built a modern market at Takoradi, which is at present the chief base for the mechanized fleet. The traditional women fish traders continue to buy the catch, but have been provided with ice and cold storage facilities, so that they can increase the quantities of fish they can handle. It is planned to set up cannery and fish meal and freezing plants to handle the large quantities of tuna which it is expected the new deep-water vessels will land.

Acquisition of improved transport means

This aid is directed primarily to assist in the acquisition and/or improvement by insulation and in other ways, of vehicles for the road transport of fish. Again, aid for these purposes is not so common. One reason for this may be the difficulty that arises in some countries in obtaining adequate security for loans on movable property.

Improvement of retail premises

A very limited amount of aid has been given for such purposes as the installation of frozen food cabinets in retail shops. While it is important that improvements in the display of fish in retail establishments be made, in the interest of stimulating consumption, there are practical difficulties in giving financial assistance to retailers. The main objection is that fish retailing, and in particular frozen fish retailing, is not an exclusive trade, but is often carried on as part of a mixed business. There are, consequently, strong governmental objections to the extension of aid in this direction, because it would immediately give rise to claims for similar assistance from other retail trades.

Nonspecific aid to fisheries

Nonspecific aid, i.e., that given not to individual fishermen or fishery enterprises, but for the general benefit of the industry, takes a number of different forms: research, harbor and dock works, development of road and rail systems, general housing and social development, technical assistance and education. It is outside the scope of this study to discuss details of aid of this kind. The success of specific aid extended to the fishery industry, nevertheless, is closely related to measures designed to stimulate general economic development.

The above ten categories of assistance, with their numerous subdivisions, indicate how varied are the specific objects of financial assistance. It may perhaps be asked whether some schemes of assistance for specific objects are not too narrowly drawn, in that a strict limitation of aid may cause development to be directed into certain channels, whereas a longer-term view might suggest the need for a wider front of advance. It is probably true that in the early stages of development, e.g., in the conversion of a canoe fishing fleet to mechanization, aid should be confined to a single object, namely the supply of outboard motors. At a later stage, however, it might be necessary to widen the scope to include assistance for the building of new and improved types of fishing vessels. Provided the development of the industry is matched by a widening of the scope (but not necessarily the aggregate amount) of assistance, the danger of retarding progress or directing it into the wrong channels will be minimized.

Forms of aid

Loans

Loan assistance constitutes by far the largest element of financial assistance given to fisheries under aid schemes. It is also the easiest to justify on economic grounds, in that it presupposes that the assets toward the cost of which the loan is to be applied will be put to a productive use and thus yield a net return on the money invested. The making of assistance available to recipients on a repayment basis also involves them personally in the effective use of the equipment, since they are

obliged to make interest payments and repayments of capital on the due dates.

The varied purposes for which loans are given have already been described in the previous section. The terms on which loans are given - the percentage of the total cost of projects which are covered by loans, the rate of interest, the repayment period and the security required - vary very significantly from one country to another. An analysis carried out in relation to public loans for the acquisition or improvement of fishing vessels, engines, gear and other equipment shows that the percentage of cost covered ranges from 30 to 100 percent, the interest rate from nil to 12 percent and the repayment period from 6 months to 20 years.

Typically, the percentage of cost covered by loan assistance is from 50 to 80 percent. In almost all cases, the recipient of aid is expected to make some contribution to the cost from his own resources. If he is entitled to a grant payment in respect of the project, the loan percentage is generally reduced. In the United Kingdom, for processing plant construction, where no grant is given, the maximum percentage of loan is 80 percent; for vessels where a 30 percent grant is given, the loan maximum is only 55 percent, the fisherman having to provide the balance of 15 percent from his own resources.

It is generally true that the maximum amount of loans made available is related more to the fisherman's need and the extent to which he can meet part of the cost from his own resources than to the specific security represented by the vessel or other object of assistance, or such collateral security as may be required. A close calculation of rates of depreciation and obsolescence of fishing assets would probably reveal that, in general, the maximum loan amounts advanced are greater than would be justified by strict reference to the value of the assets created. This feature is, of course, justified by the special assistance nature of credit aid to the fishery industry. It is a common feature of aid schemes that larger percentages of loan assistance are available to the smaller coastal fishermen than are offered to the owners of larger vessels and to companies. In many cases, the latter do not qualify for loan assistance at all.

The very wide variations in the rates of interest charged on loans reflect the different attitudes of administrations toward the question of supplying loans at subsidized rates of interest. In certain schemes, loans are made interest-free, while in others the rates are at or near commercial levels. A decision has to be made as to whether special aid or subsidy

should be given in the form of specially reduced interest rates or whether aid should be given in another form. There is in any case an element of subsidy in the availability of loans to the smaller fishery enterprises, even at so-called commercial rates. While these rates may correspond to market rates for loans for the general purpose of capital construction, the individual credit standing of many recipients in fisheries is such that, even if loans were available to them at all in the private capital market, they would be on interest terms far more onerous than offered under aid schemes. Indeed, if this were not generally so, the justification for special credit aid schemes would disappear. In fact, it is a feature of many schemes that ability to raise loans from normal financial sources at reasonable rates of interest disqualifies an applicant from receiving loan aid under the scheme. It has also been suggested that "commercial" rates offered to the fishery industry in some countries do not reflect the true risk element involved, because private investment agencies, with little knowledge of fisheries, assume that the risks are greater than they actually are. It is perhaps dangerous to accept this argument without more detailed study of the facts.

Objections have been raised to subsidized rates of interest for fisheries, because they lead to requests for similar treatment from other industries suffering from economic difficulties, which, if acceded to, may give rise to a serious disturbance of a country's money market. Nevertheless, whatever may be the objection to subsidized interest rates in theory, they are a very common feature of aid schemes. They are encountered in the form both of direct loans at reduced rates and of interest allowances to reduce interest payable by fishermen on private loans. If it is recognized that the income earning capacity of the capital assets to be created from the loans is likely to be subnormal - as it may well be for example in the case of inshore vessels, aided for social rather than for economic reasons - then it is no doubt reasonable to apply reduced rates of interest to such loans, rather than be faced with the need for introducing further aid for the fishermen owners when they are unable to meet the interest demands at full "commercial" rates out of the earnings of the vessels.

Besides the element of subsidy involved in making loans available at less than commercial rates of interest, interest rate rebates for prompt payment of loans when due are also in the nature of subsidies. In the Philippines, a rebate of 1 percent of the interest is made for loans paid on time. A reduction of interest rates on loans already advanced can also

be a form of assistance in difficult times. In January 1961, for example, the Government of Iceland reduced interest rates by 2 percent, in addition to extending the term of short-term loans, and defaulted debts to 10, 15 or 20-year loans.

The periods for which loans are offered are, in general, related to the expected life of the object of assistance. Loans for fishing vessels and fish-processing plants commonly extend up to 20 years, while certain housing loans - in South Africa for example - are repayable over as long as 30 years. At the other extreme are short-term loans for fishing gear and equipment, generally granted for one to three years only. Engine loans vary according to their anticipated life in use. Generally, it is undesirable to make loans for engines for periods extending much beyond ten years, and a considerably shorter period may be justified for the smaller types of engines used in coastal fishing vessels. In some schemes, periods are fixed in accordance with the purpose of the loan, while in others maximum periods according to purpose are laid down. In the latter instance, a borrower can elect to take a loan for a shorter period than the maximum. Although there might seem to be little practical difference between these two methods, in practice it is often found that interest rates are lower on short-term than on long-term loans. For this reason, the advantage on balance would seem to lie with the second method. There seems little purpose in insisting on a borrower taking a loan for a fixed period of, say, ten years, if he has the skill and resources to pay it off in five years and can qualify for a lower rate of interest in electing to liquidate his obligations in the shorter period. It then becomes an administrative problem, to ensure that an applicant's skill and resources are, in fact, adequate to meet his higher annual repayment commitments under the shorter-term loan.

Grants

The payment of direct monetary grants toward the initial cost of vessels, engines and equipment is a considerably less common form of financial assistance than loans. The principal justification claimed for the giving of construction grants by those countries applying this form of assistance is that they have a more immediate effect and give an initial impetus to a development program which may be far more slowly achieved, if at all, by loan assistance alone.

Experience in the United Kingdom over the last ten years supports this contention. In 1952, loans were offered of up to 60 percent of the cost of construction of new vessels, but the response was negligible. As the need for a rapid modernization and re-equipment of the near- and middle-water fishing fleet was urgent, grants of 25 percent of the cost of new vessels, in addition to the 60 percent loans, were introduced in 1953. This had an immediate effect, and within a very short time the required momentum for a rebuilding program had been achieved. It can be argued that an increase in the percentage of the cost covered by loan aid to say 80 or 85 percent may have had the same effect. This is possible, but the effect of a grant in bringing about immediate development decisions is greater, because it does not bring with it long-term liabilities for the entrepreneur in the same way that a loan does. Direct grants are naturally subject to certain conditions to safeguard the expenditure of public money. Generally, the recipient undertakes to use the vessel for fishing purposes in a diligent and effective manner, and possibly in a particular fishery, for a specified number of years. Failure to carry out this commitment makes him liable to repay the whole or part of the grant.

To the extent that some loans are given interest-free or at very low rates of interest, they resemble direct grants. Direct grants have the advantage, however, that once given and made subject to certain commitments, they do not give rise to administrative problems of repayment or servicing. If grants are accepted as necessary, for the purpose of giving an initial impetus to a program, they are best applied in conjunction with a loan scheme. It is clearly impracticable for grants to be given in respect of more than a relatively small proportion of the total cost of a vessel or other object, so that much of the balance still requires to be covered by loan facilities.

In spite of some success in the application of direct grant assistance to particular rebuilding and re-equipment problems in certain countries, the general feeling, particularly in developing countries, is against making grants. In the sphere of international financing of developing countries (which will be considered in greater detail in the next chapter), the present tendency is to substitute loans on very generous interest and repayment terms for outright grants. Within national administration, too, the system of grant aid to particular industries, including fisheries, is becoming progressively less favored. Among reasons which have been put forward for this dislike of direct grant aid are:

1. The effect of grants in upsetting the general pattern of competition between industries, and thus creating an imbalance in development.
2. The unpleasant consequences which result from a cessation of grant aid, particularly in developing countries, where recipients find it difficult to understand the reasons put forward for discontinuance.
3. The psychological effects of grants on the recipients in creating an automatic reliance on public grants without the sense of responsibility that goes with loan assistance, where specific obligations are involved.
4. Support funds being limited in amount, direct grants may be available for only a limited number of applicants, which may make it impossible for newcomers to obtain assistance. In the long run, this may stifle competition and hamper expansion. Under a system of revolving loan funds, support funds can be distributed to a far greater number of individual beneficiaries.

These arguments carry considerable weight. The role previously played by grants in giving the initial impetus to development, therefore, may in future be taken over by loans made available on very favorable terms, or in certain circumstances bearing no interest at all, either for a limited period or for the whole life of the loan.

In certain countries, direct grants are applied to meet special needs, such as disaster relief in Japan. Grants are also given to support cooperative societies, either in the stage of formation, or subsequently, and increasingly to assist research.

Operational subsidies

Operational subsidies, i.e., payments made to vessel operators to meet deficiencies in earnings, are generally defended as a temporary expedient to tide the industry or a particular section of it over a period of difficulty until long-term measures of rehabilitation can be put into effect. In the United Kingdom, where operational subsidies have been paid for over ten years to the inshore, and near- and middle-water sections of the fleet, they have always been regarded in this light and the industry has been warned that it is the government's intention to terminate subsidies when re-equipment and modernization based on grant and loan assistance have been completed. Unfortunately, recent events have

made the need for operational subsidies as great as ever, in spite of the considerable degree of fleet modernization achieved, so that the recent Committee of inquiry into the fishery industry[1] was obliged to recommend the continuance of operational subsidies for a further ten-year period as well as their extension in certain directions. Large subsidy payments to the farming industry in respect of foodstuffs which are important competitors to fish also make it difficult for the fishing subsidies to be withdrawn.

The quasi-permanent nature of this form of aid prompted some recipients of rebuilding grant and loan assistance to take operational subsidies into account in assessing their building programs and in calculating the economic viability of particular sizes and classes of vessels. How to cut this knot was one of the questions it was hoped the Committee of inquiry would answer. Unfortunately, it could see no immediate prospect of finding an appropriate substitute for subsidy aid.

Taxation and import duty relief

Considerable assistance is given to fishery industries in a number of countries by providing relief from taxes and from import duties on fishing vessels, gear and equipment. In 1960, the Government of Argentina exempted new fishing vessels of up to 3,000 tons from import surcharges for a period of two years. As compensation for the loss of protection, however, a subsidy is to be given to domestic shipbuilders. The Government of British Guiana has granted to locally incorporated fishery companies the right to import machinery, fishing vessels and equipment duty-free. It is also considering an income tax holiday for processors of canned fish and shellfish and manufacturers of fish meal. The Government of Chile, in April 1960, gave special concessions to the fishery industry in respect of tax relief. These included a 90 percent reduction in profit and real estate taxes; exemption from distribution taxes and some classes of sales tax; exemption from import duties on fishing vessels, machinery, nets, engines and other equipment, fuel, freezing equipment, etc. To enjoy these concessions, entrepreneurs must capitalize at least 75 percent of their profits over the next ten years by investment

[1] *Op. cit.*, p. 9.

in the development of the fishery industry, other related activities, or construction of workers' housing.

It is to be expected that concessions of such scope will bring about a substantial development of the industry. There remains the problem of how far concessions applied to the fishery industry can be refused to other basic industries of the country, but presumably this has been considered by the governments concerned in making their decisions on the assistance to be offered to fisheries.

Guarantees and loan insurance

The purpose of aid of this nature is to encourage the giving of loan aid to fisheries by private investors on reasonable terms, by offering a guarantee or insurance cover to the lender for the repayment of the loan.

In 1960, the United States Department of the Interior introduced a new program to insure mortgages given in respect of the construction, reconstruction, and reconditioning of fishing vessels. Under this scheme, the government insures the entire amount of the mortgage, which may not exceed 75 percent of the total cost of the work on the vessel, may not extend more than 15 years, nor carry a rate of interest exceeding 6 percent. The insurance premium is 1 percent per annum on the average unpaid balance, when the mortgage is over 50 percent of the cost, and 3/4 percent when it is 50 percent or less of the cost. The effect of this scheme is that the Government of the United States guarantees the lender or mortgage holder the insured amount. If the borrower fails to pay, the government pays but has legal recourse against him. The insurance premiums are placed in a revolving fund, to pay claims. If at any time the fund is inadequate to meet claims, the balance can be borrowed from the Treasury.

Guarantees against default are also provided for in aid schemes operated in Belgium and Canada.

Hire purchase and credit sales

The hire purchase of vessels and equipment to fishermen leaves their legal ownership in the hands of the lending agency, until all the installments of cost have been paid by the purchaser. The advantages of this

arrangement are that during the period of construction and early years of operation of the vessel or equipment, the lending agency, as legal owner, has the power to intervene, where necessary, to ensure that sound standards of construction are observed, adequate repairs made, claims under guarantees fulfilled, etc. In developing countries, where hire purchase arrangements have been extensively applied to vessels, engines and equipment, the agency has a far greater standing and influence vis-à-vis builders and engine manufacturers than have the individual fishermen, with their very limited education and technical knowledge. In developed countries, on the other hand, the hire purchase system has not been extensively used, probably because the fishermen, in general, are able to deal independently with builders and suppliers, with the support, in difficult cases, of the lending agency. In addition, the lending agencies in many countries, particularly where they are governmental or statutory bodies, have been disinclined to enter into direct contractual relationships with suppliers, in view of the additional commercial and technical problems that this would involve.

Credit sales, in contrast to hire purchase arrangements, involve the immediate passing of property rights in the equipment to the buyer, and any default on payment of installments cannot be met by seizure but only by suing for simple debt. Credit sale systems have, in general, been confined to the purchase of fishing nets and gear. From the lending agency's point of view they are subject to the same objection as hire purchase arrangements, in that the gear must be purchased by the agency itself.

6. ORGANIZATION OF FINANCIAL ASSISTANCE

Provision of funds in developed countries

The *raison d'être* of special schemes of credit for fishery industries in developed countries lies in the lack or inadequacy of the normal flow of risk capital into them. Capital is normally available for industry development from three main sources.

1. From within the industry itself, in the form of undistributed profits plowed back into companies and firms; depreciation funds and capitalization of reserves of various kinds; capital contributions by owners, including share capital and deposits of members of co-operative societies; further capital investment by shareholders of companies, by taking up " rights " issues, etc.
2. From outside the industry, in the form of share capital made available by investors, in response to invitations to take up shares or stock in existing or new enterprises.
3. From outside the industry, in the form of loan capital, again made available by private or institutional investors, generally on the security of debentures or secured in other ways.

In developed countries, until recent years, the private flow of capital into fisheries had been adequate to enable the industry to develop and improve its equipment and capital resources. As has already been explained, the combination of wartime destruction of vessels and equipment, the quickening rate of obsolescence and the general inflationary situation in most countries, however, had the effect both of diverting capital into other channels and of making the industry's internal capital resources inadequate to meet the urgent and heavy demands for rebuilding and re-equipment. It therefore became necessary to augment the above sources of capital (*a*) by making available, through special assist-

ance schemes, loan capital and other forms of monetary assistance such as grants and operational subsidies from governmental sources; and (*b*) by encouraging, through governmental or institutional guarantees, taxation rebates, and in other ways, the flow of private capital resources into the industry.

It has always been a basic principle of special action of this kind to increase the capital resources available to fishery industries under conditions of free competition in the money market, to avoid, as far as possible, direct competition with private institutions and existing sources of credit. Such aid, too, is intended to be of a temporary nature, however quasi-permanent it might unfortunately become in practice. To this end, the adoption of aid schemes designed to induce private institutions to make credit available to the industry is favored over the provision of special public facilities. In the Netherlands, for example, the view is strongly held that the role of government in the financing of fisheries should decline in importance. As soon as governments showed they were willing to provide some form of guarantee, private institutions would lend more freely and the industry would be able to meet all its needs from normal credit sources. Experience in the Netherlands in fact suggests that the establishment of temporary government credit assistance there, for the rehabilitation of war-damaged facilities, has led to private capital flowing more easily into the industry. Satisfactory repayment records on government loans have brought about an improvement in the credit rating of the industry. The view of the leading fishery administrators in the Netherlands is that, once government has become involved in financing a particular segment of industry, its general policies become colored by this factor, as it cannot afford to risk the loss of its investment by refusing to continue assistance. Heavy reliance on governmental assistance is also bad for industry morale, they maintain, as reliance on a public dole tends to diminish competitive vigor and individual initiative. The primary task of government, in their opinion, is to provide a healthy climate for operations in the private sector.

While the above views are wholly admirable in setting out desirable standards to be followed in giving assistance to fishery industries in developed countries, the fact remains that in many of these countries the whole of the fishery industry, or at least large and (socially and economically) important sectors of it, have suffered from an insufficiency of capital from private sources and have had to call on government assistance to

supply the often substantial balance of capital required to meet the current needs for large, expensive and essential rebuilding and re-equipment programs. Such programs are often of as much importance in the wider national interest as in the more limited interest of the fishery industry itself.

In making available this balance of capital, however, governments should undoubtedly have regard to the need for avoiding direct competition with private capital sources and should operate as complementary agencies to fill the obvious gaps which exist in the private sector.

The main gap in most financial systems is the relative shortage of facilities for making long-term loans to the medium-sized or small-sized firm, with a majority of enterprises in the industry falling into this category. Even in highly developed industrial countries like the United States, the United Kingdom and the Federal Republic of Germany, the average fishery enterprise is small, although there are a few large organizations and average size and range are tending to increase. The bulk of the facilities is required on a long-term basis, but the size of the loan is normally too small to justify the flotation of a bond issue.

The function of the commercial banker is primarily that of supplying short-term funds for working capital purposes. The overdraft system, with its limit as to amount and the theoretical power to call in or reduce the overdraft at short notice or without notice, is the main instrument of the banks' short-term financing. Although overdraft facilities to a firm may continue unaltered for a long period of time, the banks will not normally undertake long-term lending on fixed terms.

More permanent loan capital may be available from a number of other sources. One of the principal providers of loans on the security of property is the insurance company. The types of property which can be offered by firms in the fishery industry as security, however, in most instances are not looked at too favorably by investors of this kind. A further source may be institutional loan agencies, such as the Industrial and Commercial Finance Corporation (ICFC) in the United Kingdom. This body was set up in 1946 by the joint-stock banks, with resources of £45 million, with the approval of the Bank of England and the Government, to supply credit for industrial and commercial businesses or enterprises, particularly in cases where existing facilities provided by banking institutions and the stock exchanges were not readily or easily available. The minimum loan is £5,000 and the maximum £200,000. By the end of 1958, the ICFC had loans in the total amount of nearly £35 million to about 650 accounts outstanding. The assistance to the fishery

industry from this source has, however, been very small indeed. At present, with credit assistance available from government lending agencies, institutional lenders have tended to leave the supplying of loan capital to these agencies, both because of the pressure of demand on their own resources from other directions and because of the peculiar nature of the risks inherent in the fishery industry and the rather specialized type of security that borrowers have to offer.

An illustration of the various sources of funds for fishery development is given by the experience of Portugal. Funds are made available partly through self-investment by the industry, partly through corporations established in the fishery sector, partly by loans from commercial banks and private financiers, and partly from loan money allocated under the 1959-65 Economic Development Plan. Additional needs for funds are met by issue of bonds which are guaranteed by the state. A third series of bonds was authorized in June 1960, bearing an interest rate of 4 percent for the use of the special Government Fund for the Renovation and Re-equipment of the Fishing Industry. The bonds are sold either to institutions or to the public.

An issue of bonds, backed by a government guarantee, is one method of making finance available to public agencies, by giving to the private sector sufficient inducement, in the form of "gilt-edged" securities, to invest in fishery enterprises. Such investment normally could not be expected to be forthcoming in conditions of free competition for investment funds.

Other methods of making funds available to special lending agencies include government investments in the share capital of the agencies, direct budgetary grants and appropriations, direct loans to agencies, and allocations of duty revenues. Of these, by far the most frequently encountered is the direct budgetary grant and appropriation. Share investment may be wholly governmental, with investment from private sources in debentures or deposits. The aim should be to combine the maximum volume of private investment with public investment consistent with an over-all balance. As an example of the allocation of duties, a proposal of United States federal aid to states with commercial fisheries was endorsed in June 1961 which would grant to such states an amount equal to 30 percent of the customs duties on fishery products, to encourage fishery research and rehabilitation and development programs. Such aid would be in addition to the present Saltonstall-Kennedy program for the betterment of the domestic fishery industry, which is also financed by

annual amounts equal to 30 percent of the customs duties on fishery products.

Of the two main alternative methods of securing additional capital for fisheries, i.e., encouragement, by special incentives and guarantees, of additional private investment, or direct grants to special lending agencies, the former has the advantage of interfering as little as possible with normal financing. Its principal disadvantage is that its effects are uncertain. The incentives provided may turn out to be inadequate, either because of their size or because other competing demands for capital are too strong. In consequence, the objectives of policy may not be attained and the necessary capital investment in fisheries not secured. In contrast, direct budgetary financing of a lending agency can ensure that the capital goes into fishery investment. It can also be regulated annually in accordance with the speed of progress of re-equipment or with the other purposes for which it is intended.

Provision of funds in developing countries

In developing countries, the same subdivision of sources of development capital can be made as in developed countries. The quantities available from within the industry are, however, normally very small indeed, because of the low earnings and low productivity of the fishermen who, for the most part, belong to the category of subsistence producers. The large bulk of the capital required must, therefore, come from outside the industry, either from private domestic or foreign investors, or from public funds, made available either by the government, international agencies or foreign governments and institutions.

Of these various sources, the supply of capital from abroad, either direct to the lending agencies or through the national government, is the most important. It is on the continuance and increase of such facilities that the speed of development of the fishery industry in most developing countries depends.

Foreign capital is made available to developing countries in three main ways:

1. By multilateral contributions through international agencies.
2. By bilateral contributions directly from one country to another, not passing through an international organization.
3. By private investment, which may in some instances be linked with contributions under (1) and (2).

Multilateral aid

In view of the great interest of developing countries in increasing the amount of capital available to their fishery industries, it will be useful to describe in some detail the powers and functions of the principal international lending agencies, the criteria they adopt in the selection of projects for assistance, the information they require in assessing both the need for assistance and the prospects for favorable results, and the relevance of their activities to the special needs of fisheries.

International Bank for Reconstruction and Development (World Bank)

The Bank makes fixed interest loans to governments and also to private enterprises, provided the loans are guaranteed by a member government. Interest rates are about 6 percent and most loans have a maturity period of 15 to 25 years. Loans are given for specific purposes only. The Bank must ensure that the funds borrowed are used economically and efficiently. It also gives advice, on request, on planning and development problems, even if these are not directly related to a loan application.

The Bank's funds are supplied through capital subscriptions, bond issues and sales of loans. Bonds issued on the principal capital markets are often held by investors outside the country of issue. The Bank has also increased its funds by the sale of its own loans (or participations in them) to other investors, either by arranging for participation at the time the loans are made or by selling subsequently from its loan portfolio.

In making funds available, the Bank gives preference to self-liquidating projects. For this reason, it is difficult to obtain financing for fishery projects which are not organized along strictly commercial lines. Loan funds cover only the foreign currency requirements of development schemes.

International Finance Corporation (IFC)

The Corporation, an affiliate of the World Bank, was established in 1956 to provide supplementary finance for productive private enterprises in developing countries which would fail to attract private capital without such assistance. The loans do not require government guarantees, and are normally made with a ten-year maturity at an interest rate of about 7 percent.

International Development Association (IDA)

The Association, a new affiliate of the World Bank, began operations in November 1960. It is intended to make long-term loans on more favorable terms than those of the Bank, with less strain on the balance-of-payments position. The IDA is giving loan assistance exclusively to developing countries. Mr. Black, President of the World Bank, has defined the countries to which credits by the Association can be given as "countries which, for reasons beyond their control, are not able to finance a satisfactory rate of development with their own resources plus conventional financing."

This definition must be construed as including not only those countries that cannot borrow at all but also those for which it would be inadvisable to borrow by normal methods, because of existing burdens of short- and medium-term debt.

The first four loans made by IDA were for 50-year terms, completely free of interest and with 10-year periods of grace before the start of amortization. After the first 10 years 1 percent of the principal is to be repaid annually for 10 years and 3 percent for the final 30 years. In view of these terms, it is scarcely surprising that the Association reports a "lengthening list of proposals under investigation all over the world."

Inter-American Development Bank

The Bank was set up by the Organization of American States in 1960, with the object of contributing to an acceleration of the process of development in member countries. The authorized resources of the Bank were $1,000 million available for direct loans to member governments and private entities in these countries. In addition to lending its own funds, the Bank can guarantee in whole or in part loans by private investors. It is expected that the Bank will serve as a model for further development of financial assistance on regional lines.

Development Assistance Group

This Group, consisting of the members of the European Economic Community, Canada, Japan, Portugal, the United States and the United Kingdom, has been set up to promote social and economic development in

developing countries with a high proportion of aid to be given on a long-term basis. A great deal of bilateral aid has already been given by North America and by many of the European countries, particularly to those overseas countries with which they have special political and economic links. The trend toward placing more of this aid on a multilateral basis is likely to be accentuated in the future, since bilateral aid is sometimes opposed on the grounds that it is made for political or strategic reasons and thus results in a maldistribution of aid between developing countries. It will, of course, not replace bilateral aid, but it may well widen the bounds of aid and make a wider variety of currencies available to developing countries. According to latest plans, the Development Assistance Group is to become a suborganization of the new Organization for Economic Co-operation and Development (OECD), formerly OEEC, and its name is to be changed to Development Assistance Committee.

Other financial arrangements

Among more loosely defined multilateral aid groups, the so-called India Club is worthy of note, as pointing the way toward the development of multilateral aid aimed at a specific national development program. The India Club, made up of the United Kingdom, Canada, France, Western Germany, Japan, the United States, the World Bank and the International Development Association, has agreed to provide nearly £ 800 million worth of aid to India in the next two years, which should enable India to carry out her third five-year plan with confidence in the ultimate achievement of its objectives. An arrangement of this kind might be suitable also for nationally or regionally organized fishery development programs.

Nonfinancial assistance

United Nations Technical Assistance Program. Technicaal assistance is administered by the United Nations and its various specialized agencies through three channels: (*i*) the regular program of the agencies; (*ii*) the Expanded Program of Technical Assistance (EPTA); and (*iii*) since recently also, through the United Nations Special Fund. The Expanded Program of Technical Assistance is administered by the Tech-

nical Assistance Board and executed by the specialized agencies of the United Nations, FAO, WHO, etc. The purpose of EPTA is to help underdeveloped countries to strengthen their national economies through the development of their industries, including agriculture and fisheries. In the latter two fields, the projects are carried out by FAO. Assistance is given only in response to specific requests by governments. It covers such fields as expert advice, individual training through fellowships and training centers, provision and dissemination of technical information, and provision of equipment and supplies.

The Special Fund has much more narrowly defined terms of reference than EPTA. Its resources are wholly devoted to the financing of surveys, applied research, vocational and advanced technical training and pilot projects. The projects have to be large-scale and, consequently, can hardly be of a short-term nature. So far, projects approved by the Special Fund have always been executed by the specialized agencies. In the field of fisheries, FAO has been functioning as the Executing Agency. At the present writing, two Special Fund fisheries projects are in operation, both in South America, and concerned with research and technical training.

European Productivity Agency. Since 1956, the OECD has operated, through its European Productivity Agency, a special technical assistance program for members with regions in the process of economic development. Greece, Turkey, Italy, Yugoslavia and Spain have taken advantage of this program, which is linked as closely as possible with national and regional development programs. Special technical assistance and study and research programs have been organized and trial and demonstration areas (in Sardinia, Epirus and Turkey) have been set up.

General considerations relating to the provision of international or regional aid

In considering the possibility of securing additional aid for fisheries development from international or regional agencies, emphasis must be laid on the part the countries in need of capital must play in attracting such capital. Political and economic stability and the creation of an infrastructure play an important part in inducing confidence among investors. International credit institutions are prepared to advance funds only when they are convinced of the need for development as well as of favorable prospects of a satisfactory return on their capital. Be-

cause of limited funds, the agencies are faced with a problem of allocation and can select only the most promising situations.

In support of applications for aid, three main reasons can be cited. The first is that capital investment in other than food-producing industries leads to rising agricultural prices and thereby creates economic unbalance; investment in fisheries may well help to achieve a better economic balance. Secondly, there may be social reasons for investment in fisheries, where isolated communities with no alternative sources of income require to raise their low living standards. Finally, there are infrastructure reasons, which are probably the most important to international institutions. Where it appears obvious that development has been retarded by lack of equipment, either in the catching or marketing of fish, international agencies may advance funds, because they will judge the prospects of satisfactory financial returns as favorable.

One of the major obstacles standing in the way of such assistance being made available is the lack of knowledge of opportunities for development. It has been suggested that the countries concerned should prepare reports summarizing their needs and present them to FAO for review and evaluation. FAO should then forward them to the appropriate international lending agency with specific recommendations for action. This suggestion is being considered by FAO. Surveys of this type could be undertaken either in response to an invitation by the agency considering a loan application or in response to a technical assistance request from a country which wants an expert assessment of development potential in preparation of the submission of a loan appreciation. FAO is also considering whether procedures can be worked out under which they could certify to the intrinsic value of project proposals and thus assist lending agencies in carrying out the technical part of the credit investigations. FAO is already making a significant contribution by employing experts in response to specific technical assistance requests to conduct preliminary fishery surveys, and by disseminating, as one of its regular program functions, information on credit sources which might be approached by countries requiring loan capital from abroad.

There are, however, increased possibilities of obtaining knowledge of development opportunities through the operations of the United Nations Special Fund, described above. FAO in this connection has co-operated in a number of instances in the appraisal of requests made to the Special Fund.

In putting forward projects for assistance to international agencies or

other investment sources, it is most important that careful and expert attention should be given to the form and presentation of the case. Even in developed countries, the presentation of facts by organizations and associations to government departments leaves very much to be desired. In many cases a sound project worthy of assistance and support does not get the attention or study it deserves, because of a poor and unconvincing presentation of the facts and arguments. Well-documented and well-prepared project proposals must be submitted if the claims of the fishery industries are to compete effectively with those of other industries for special aid. Lord Godber, in his most recent annual statement as chairman of the Commonwealth Development Finance Company, pointed out that it was often a problem to find, in a developing economy, projects suitable for financing. There were also, in his view, many projects which, though suitable, had been put up in such a form that no merchant banking house could possibly consider them. It had become one of the nonfinancial services of the company to turn realizable projects into banking propositions.

It is perhaps a matter for consideration to what extent guidance on the lines on which cases can be most effectively presented might be drawn up and made available to interested governments, and to what extent the services of experts in this field might be supplied to the countries concerned. It is often true that countries themselves have only the vaguest idea of the extent of their natural resources and the possibilities of development, and this applies particularly to fisheries.

The fact that certain types of international loans and many private loans are often available only if a government guarantee is offered, has given rise to a suggestion that FAO itself should guarantee or underwrite international loans for fisheries. This is, however, not possible, both on constitutional grounds and because FAO has no finances at its disposal except those which have been approved by its governing body, the biennial FAO Conference, for specific projects included in its program of work. In the absence of funds to back it, a guarantee from FAO is, of course, of no financial value.

Bilateral aid

The amounts of bilateral aid which have been made available to developing countries are very substantial and it will not be possible to describe

more than a few of the methods involved and the projects for which assistance has been given. As has been already explained, much bilateral aid has been directed by developed countries to those developing countries with which they have historical, political, economic, strategic, and social ties. Thus much of Britain's bilateral assistance has been given to Commonwealth countries and colonial territories. The United States, besides making assistance available to other countries on the American continent, has a number of spheres of special concern in other parts of the world to which aid has been channelled. France, like the United Kingdom, has tended to channel aid to associated countries overseas. Purely economic considerations have also had a significant effect. German aid has largely been directed to countries whose prospects of becoming important markets for manufacturers of the Federal Republic have been considered promising. Japan, too, has engaged in a wide variety of bilateral aid arrangements, aimed at linking Japanese industrial development with the facilities available for the supply of raw materials and for marketing operations in developing countries.

United Kingdom

The older independent Commonwealth countries have in general been able to raise capital through private investment. In this, they have been assisted by the Commonwealth Development Finance Company, a private company set up in 1953 with capital subscribed by the Bank of England and some 90 private concerns. The main object of the company is to assist in providing finance for development projects, where ordinary private sources are inappropriate or inadequate.

The newly independent Commonwealth countries, however, have not been able to raise enough money from private sources, including the London money market. Commonwealth assistance loans have, therefore, been made available, at normal interest rates, with a 5-to-20-year repayment period, and a grace period before amortization of from 2 to 8 years.

The colonial territories, too, have in general been unable to raise private capital and have, therefore, had to rely on assistance by the Government of the United Kingdom to supply the bulk of their capital needs. Direct grants and loans under the colonial services vote are provided to territories which need help in the balancing of their budgets or for

specific purposes such as emergency expenditure or hurricane rehabilitation.

The main source of aid for development projects in the colonial territories has been the Colonial Development and Welfare Act. Under this, both grants and loans have been made. The terms of loans and interest have been concessionary for public development schemes, while for general loans, the current rate of interest has been charged. Funds are also provided under the above act for technical assistance, research, training and surveys.

Government funds are also available to assist the economic development of colonial territories through the Colonial Development Corporation, set up in 1949. This agency generally undertakes projects in co-operation with private firms or a colonial government. Government approval has to be sought for its borrowing, but it operates on commercial lines in the selection and implementation of individual projects. Generally, loan terms and rates of interest conform to current practice.

United States

United States bilateral aid to developing countries has been provided by the International Co-operation Administration (ICA), the Development Loan Fund (DLF), the Export-Import Bank, and recently, also by the Food for Peace Program and the Peace Corps.

Quite lately, the International Co-operation Administration and the Development Loan Fund were abolished and replaced by an Agency for International Development (AID) within the State Department.

In the past, the International Co-operation Administration provided grants and loans, in commodities, services or cash. Grants were made for defense support to certain European and Near and Far Eastern countries. Special loan assistance was available for other countries, in the form of either specific project aid or general assistance to finance essential imports. ICA loans had a maturity of up to 40 years and a rate of interest of 4 percent.

The Development Loan Fund was organized in 1957. It was the main source of loans for long-term development programs in developing countries and made available assistance in the form of loans, open credits and guarantees.

The criteria for DLF loans were as follows:

1. Projects must be located in a friendly developing country.
2. There must be a reasonable prospect of repayment.
3. The project must contribute to economic growth and be economically and technically sound.
4. There must be no alternative finance available on reasonable terms.

The interest rates varied from 3½ percent for basic governmental projects to 5¼ percent for profit-earning type projects. Maturity ranged up to 30 years, although loans for profit-earning projects generally ranged from 5 to 15 years.

The Export-Import Bank's main function is to assist United States trade by extending loans or guaranteeing other loans, to finance United States imports and exports or to assist foreign economic development and expansion of markets for United States products. Loans are made both to governments and to private enterprises and are normally medium-term, carrying current rates of interest. Short-term commodity credits are also granted to cover the purchase of specified raw materials and foodstuffs.

Other countries

The Export-Import Bank of Japan extends loans and credits either to foreign buyers or to exporters. The main Japanese bilateral assistance in fisheries development to developing countries is, however, supplied through the Overseas Fisheries Corporation, which is providing financial and technical co-operation in the operation of jointly organized fishing companies.

The pattern of joint enterprise which Japan has developed so widely and so effectively in many developing countries is also being followed by other countries. Poland, for instance, has just signed a joint-venture undertaking with Guinea. There may well be a growing tendency in this direction, as most developing countries see great practical advantages in linking their own fishery development not only to the need for capital but also to the need for the physical and technical resources such as ships and shore facilities and technical know-how and expertise that old-established fishing countries like Japan can offer. With the urgent need for fleet re-equipment in many west European fishing communities,

it is probable that further vessels will come on offer to the developing countries. Such aid may be much more acceptable than credit to countries anxious to develop their fisheries rapidly.

British Guiana, which has already received an eight-year World Bank loan for marine and river fishing development, guaranteed by the Government of the United Kingdom, has recently encouraged the development of shrimp trawling by offering companies organized with local or foreign capital duty-free import of machinery and vessels. The companies will be subject to local taxes. The government, however, has indicated that it would be willing to consider a tax holiday for the processing or canning of fish. A French company plans to set up a processing plant. A project to establish a fishing base on swampland, furthermore, is in hand with government participation.

A bilateral aid of a rather different kind was arranged in 1959 between Greece and Portugal. The latter supplied the Government of Greece with two large factory ships, paid for from proceeds of sales of Greek tobacco sold to Portugal. The ships in turn were sold to two Greek fishing companies on very liberal credit terms.

Another special form of bilateral aid, which has many of the features of multilateral aid, is the co-operative effort known as the Colombo Plan, in which the countries of south and southeast Asia, helped by capital and technical assistance from countries outside the region, are making big efforts to develop their economies. Each country has its own program but has the benefit of consultation with the Plan members, and makes its own bilateral arrangements for the giving and receiving of assistance.

Private lending

Although the total of private investment in developing countries has been substantial in recent years, a large part of it has been in the extractive industries, particularly in oil. In Belgium, the Netherlands, the Federal Republic of Germany, Switzerland, the United States and Canada, the export of private capital can be made freely. Government guarantees are available in Germany and in the United States. French and British capital exports may be made freely within the franc and sterling areas, respectively. As has been already noted, investment tends to be channelled primarily into those developing countries in which the lenders have special political, economic or strategic interests.

There are few private enterprises in developing countries which can raise capital directly in the capital markets of North America and western Europe, so that access to such markets normally takes the form of bond issues of developing governments. Even bond issues are limited, because of the extensive experience of government defaults on such issues. Dependent territories often secure guarantees from the metropolitan governments; in such cases the bonds are as well secured as those of the parent government.

The treatment of foreign earnings for taxation purposes is varied. In a number of countries, substantial tax reliefs are given in respect of earnings of foreign investments, particularly of branch and subsidiary operations. Some countries give almost complete exemption, while others charge full tax rates, except where double taxation agreements exist.

A very important element in private financing of overseas capital investments is the system of guaranteeing export credit. Most developed countries operate a system of this kind, which generally covers both political and commercial risks. The availability of such credit up to a maximum period of five years has facilitated the provision of capital goods for economic development. Export credit guarantees are given on a commercial basis with premiums intended to cover losses over a period. Most schemes have regard to the degree of risk involved in trading with particular countries, either by varying the rate of premium or by varying the proportion of the credit risk that has to be financed by the exporter himself. In the United Kingdom, rates of premium vary, while in the Federal Republic of Germany rates are the same for all exports, but exports to a country with a default record require a larger proportion of financing by the exporter himself. The duration of guarantees also varies considerably, with a five-year maximum having been agreed by the Berne Union (the liaison group of credit insurers). There is constant pressure for the extension of this maximum. An extension much beyond five years would, however, take the transaction outside the reasonable scope of export credit guarantees and make it more in the nature of a guarantee of a self-liquidating medium-term capital investment. It may well happen, however, that the machinery of credit guarantees for exports will be extended to include medium-term investment under such guarantees. Recent developments in Canada point in this direction. The government and the banks have co-operated in setting up greatly expanded credit facilities, to finance on a medium- and long-term basis the export of capital goods.

Transactions requiring over five years credit will be guaranteed by the Export Credits Insurance Corporation.

In looking into the future course of capital investment in developing countries, it is clear that tremendous amounts of capital are still required if a substantial impetus is to be given to the progress of economic development. While at present international lending agencies are making the largest contributions, their effectiveness depends on the level of subscriptions from their members: political factors often make it difficult to raise large additional sums from member countries, many of which face heavy demands on their capital resources for strategic and economic reasons. The real reservoir of capital resources in fact remains the private investor, and attention should, therefore, be given to the conditions necessary to bring about a large increase in private investment in developing countries. Confidence is the primary need, and this might be improved by the governments of developing countries by making specific commitments with respect to their future economic policy, in particular a commitment not to nationalize foreign capital investment without full compensation or to threaten its security in other ways. It may be argued that undertakings of this kind have been made before and not adhered to. But with the tremendous competition for capital among developing countries and the urgent need to raise living standards in the interest of political and economic stability, it would be a very brave, indeed foolhardy, government that would deliberately cut off its capital supply by a breach of its commitments. Other ways which have been suggested for giving additional confidence to capital - it has been truly said " there is nothing so timid as a million dollars " - are the promulgation of a world investment code, to introduce minimum standards in international financial practices and procedures, and the extension of " joint ventures " and " development corporations " in which governments and private investors would be partners, with the former giving the necessary guarantees to the investor, who would nevertheless retain a direct interest in the operation and development of the project.

Forms of lending agency

The above discussion of the sources from which finances are made available for the fishery industry has indicated that where private finance, either through self-financing or private investment from domestic or

foreign sources, is insufficient to meet the industry's capital needs, public funds (again from national or international sources) must be made available under special financial assistance schemes, in order that the necessary modernization, re-equipment and development can be carried out. Consideration must now be given to the various forms of lending agency through which the special funds are made available to the industry.

Fishery credit agencies fall conveniently into three main categories:

1. Government departments.
2. Specialized institutions, set up under government auspices, dealing either with fishery credit exclusively or with agriculture and other related credit as well.
3. Private credit agencies, including central, co-operative or commercial banks, co-operative societies, and other institutions.

While these categories can be clearly differentiated, they are often found working together in the distribution of fisheries credit within a single country, one form operating for certain classes of credit assistance and another form for other classes.

It is clear from a study of the very wide differences in the form of credit agencies which are in operation in the various developed and developing countries that there is no ideal organizational framework that will fit all situations. In developed countries, the system of special fishery credit is of fairly recent origin and has had to be superimposed on an already existing well-developed administrative and monetary system. Moreover, the importance of fisheries in the individual economies varies very substantially. In a country like Iceland, they form the basis of the whole economy, and in Norway too they are economically very important. In the more highly developed industrial countries of western Europe and North America fisheries may be of considerable size, when appraised in absolute terms, but may be of relatively modest importance in relation to the national economy.

Most developed countries have a separate fisheries department or division in their governmental structure. Its functions will differ from country to country, but typically it has been built up to deal with fishery control, conservation of stocks, physical facilities required for fishery operations, and to carry out basic biological and other scientific research relating to fisheries. When problems arose which required the application of special credit assistance, the government was faced with the alternative

of either administering the credit arrangements itself, delegating the duty to specialized credit agencies such as banks, or setting up new agencies, with the necessary powers to administer the schemes.

Where credit needs were thought to be temporary, the tendency was to avoid setting up new agencies; where long-term needs were in evidence, governments preferred to transfer the direct administration into other hands. In the United Kingdom, for example, the limited scheme of 1945, designed to assist in the rehabilitation of coastal fishermen returning from war service, was administered by the fisheries departments of the government. The administration of the wider schemes of grants introduced in 1953 for an initial ten-year period, designed to achieve the modernization and rebuilding of a substantial section of the fishing fleet, was delegated, however, to the White Fish Authority and the Herring Industry Board, which are statutory bodies with very much wider powers of reorganization and development. They have the advantage that in the administration of credit they can also give attention to matters which should go hand in hand with it, such as the concurrent improvement in marketing, research and training.

In the United States, in contrast, the administration of the existing fishery credit is vested in the hands of the Secretary of the Interior. Among the advantages claimed for this arrangement are the specialized knowledge of fisheries available in the department which has the responsibility for administering fisheries and the speed and cheapness with which information on technical aspects can be obtained. A drawback is that the technical personnel lacks, in the majority, specialized experience in banking procedures and operations. Also, there is a danger under direct government administration that political pressures can be brought to bear on the staff administering the scheme. In the United States, the liberally exercised power of Congress to investigate the operations of executive agencies greatly reduces this danger. In general, there is satisfaction in the United States with the working of the directly administered credit program.

Experience in Japan with direct government administration contrasts sharply with that of the United States. Under arrangements which had existed in Japan from 1951 to 1953, with credit being dispensed directly by the fishery department, recipients had tended to consider loans as outright subsidies and, as a consequence of this attitude, repayments and recoveries had been poor. Furthermore, the practice in the Japanese Civil Service to make frequent transfers of officials from one department

to another meant that credit administrators lacked experience and a feeling of personal responsibility. This only served to strengthen the borrower's tendency to regard a loan as a personal gift. The unsatisfactory experience with the directly administered scheme led the government to set up the Finance Corporation for Agriculture, Forestry and Fisheries. Even this organization, it is sometimes claimed, is not sufficiently removed from outside pressure, since whenever a special need for assistance arises, fishermen take their case to the government, which then seeks to prevail upon the corporation to expand its facilities.

Where a specialized agency or institution is used in the administration of fishery credit, the question arises whether it shall deal exclusively with fishery credit or have a wider application. In a number of countries, special fishery banks or specialized institutions dealing only with fisheries are in operation. Elsewhere, the specialized institutions cover a wider field than fisheries.

The advantages of a specialized fishery bank dealing only with fisheries and the administration of credit seem to depend on the relative size and importance of the industry in the national economy. In Norway, for example, which has a State Fishery Bank, the fishery industry is a very important element in the economy and the number of fishermen and potential borrowers is large. In many countries, however, where the industry is not in the same position, exclusive concern with the financial dealings of one industry and the relatively limited volume of business involved would make it impossible to provide sound financial management.

The related question must also be raised, as to whether a specialized institution should confine its activities to purely financial administration, or whether it should have wider functions in relation to fisheries. Here again experience is extremely varied, and no definite answer can be given in favor of one particular form of organization. It seems clear, however, that only in the case of a relatively large fishery industry can a specialized agency dealing exclusively with fishery credit be justified. Where a greater spread of duties is necessary in the interest of economy of administration, it can be achieved in two directions: either by the agency dealing exclusively with credit but over a wider field than fisheries only; or by it dealing exclusively with fisheries but covering a wider range of functions than merely credit administration. Both of these alternative organizational forms are in operation, e.g., in Japan, where the Finance Corporation for Agriculture, Forestry and Fisheries, the Japan Development Bank,

and the Financial Corporation for Smaller Enterprises correspond with the first of the two alternatives, and in the United Kingdom, where the two agencies, the White Fish Authority and the Herring Industry Board operate as described in the second alternative. The relative advantages and disadvantages of these alternatives center around the importance attached to the purely financial administration of aid schemes. The "banking" organization tends to give great weight to sound principles of financing, while the "industry" organization tends to give less weight to financial considerations and more to general economic and social policies. The Japanese view is that, if there is a class of fishermen economically too weak for sound financing, assistance should be considered as a special social problem and should be dealt with as such by the government. In the United Kingdom, however, the economic weakness of a particular sector of the industry would not disqualify it from receiving financial aid under the general assistance schemes, and the agency would take other steps to see what could be done to improve its weak position.

A further subdivision of credit agencies is found in the administration of schemes. Agencies may serve special sectors of the industry only, different classes of borrowers, or they may extend loans for specified purposes only. Again it is a question of the minimum amount of work that is necessary to secure efficient personnel. Generally, it would seem very questionable whether the above limitations would result in other than uneconomic organizations. One advantage is, of course, the high degree of specialization that is acquired in dealing with credit applications from limited sectors or classes. This greatly simplifies the task of administration and reduces the need for a large range of expert knowledge among the staff.

In developing countries, in contrast to the experience in developed countries, the need for fishery credit frequently arises before a fishery administration has been established or has been built up into an effective instrument capable of operating a scheme of credit assistance. Under these circumstances, there is a problem as to whom the responsibility for organizing and distributing credit assistance to fishermen can appropriately be entrusted. In practice, a wide variety of agencies are carrying out this task. Government departments in Ceylon, India, and certain of the West Indies countries; credit or development corporations in British Guiana, Burma, Chile, Pakistan and Hong Kong; banking institutions in Greece, Israel, the Philippines, Spain and Turkey. Co-operative organizations are also used in certain countries for the administration

of public credit assistance. Alternatively or in addition, they make credit available from their own funds. Among countries in which co-operative channels are of particular importance in the distribution of credit assistance are the Philippines, Greece, India and Hong Kong. Many developing countries make use of more than one type of credit agency, according to the purpose for which the credit is given or the sector of the industry to which it is directed. In Indonesia, for example, loans are extended to fishermen by the Central Sea Fisheries Service and the Government Pawn Service for the acquisition of vessels and engines. In addition, working capital loans are made by the Farmers' and Fishermen's Bank. Loans are also available from the multipurpose fishermen's co-operatives and from the Indonesian People's Bank.

Arguments can be put forward in favor of one or other of the forms of agency used. In developing countries, industries have many problems in common. Action initiated in one sector tends to have a much more immediate and substantial effect on other sectors than in economically more mature countries. For this reason, it can be claimed that an institution charged with the responsibility for promotion of development on a broad scale is desirable. An example of such an institution is the Development Bank of the Philippines, which provides finance for a group of industries rather than for fisheries alone. On the other hand, it is claimed that direct governmental administration in the hands of the fisheries service is more appropriate to many countries, since a close knowledge of local fishery and social conditions is of paramount importance. In Jamaica, emphasis on specialized knowledge has led to the setting up of special agencies, such as the Industrial Development Corporation and the Agricultural Development Corporation, which serve specific sectors of the economy. A Fisheries Development Corporation is also projected.

As in the case of developed countries, it is impossible to prescribe any particular form of agency as ideally suited to all countries. As a general principle, it is, however, accepted that the administration of credit must not be left uncontrolled and in the hands of persons or institutions likely to take advantage of the socially and economically weak position of the fishermen. Whether the credit agency is operated under direct government supervision or is in the hands of a separate body is largely immaterial, as long as control is effective. Where a sound co-operative structure exists in the fisheries sector, there are strong reasons for using it to as large an extent as possible in the channelling of loan funds to fishermen.

Whatever form of agency is adopted in a particular country for the

administration of credit aid, the scope of authority and the degree of independence of the agency must be clearly defined. Where a statutory authority is responsible, its general powers and duties are set out in its statute. When, at a later stage, duties related to financial aid administration are laid on it under statutory provisions, it must ensure that its responsibilities are clearly defined and phrased in unambiguous language, and that its administrative policies are in line with the intent of the legislation. No matter how widely or narrowly the scope of authority is drawn, the ultimate responsibility must always remain in the hands of the government. While it may be concerned with matters other than fisheries credit, the administering agency should preferably not be concerned with price controls or the wider aspects of " special investment, " as policies on these matters may not be easily reconcilable with the objectives of the aid scheme. Matters such as the provision of housing accommodation, harbor works, roads, etc., should normally be outside the responsibility of the lending agency. In special circumstances, however, such as the provision of housing in virtually uninhabited coastal areas which are being opened up for fishery operations, the agency may have to undertake this work, as in the case of the Fisheries Development Corporation of South Africa.

Disaster relief work is also a matter which might be considered as outside the responsibility of the lending agency. Separate facilities for typhoon relief, which has a wider application than fisheries, may well be desirable.

In developing countries, the principal requirements for the successful operation of lending agencies are exercise of firm authority and maintenance of maximum flexibility in administration. Firm authority does not preclude decentralizing of operations, but it does involve retention of authority to make major decisions of policy, and to lay down firm lines of administrative procedures. With these safeguards, a maximum use of local agents, co-operative societies, etc., is desirable in the interest of speedy and efficient credit administration.

Co-operatives in credit administration

In developing countries, where the state of the small coastal fishermen is often one of chronic poverty and where there is a constant lack of capital for improvement of fishing equipment, the wholesale merchant or

middleman is generally found to be in strong financial control. This is, as already pointed out, because of the dependence of the fisherman on him for the marketing and disposal of his catches, for the supplying of working capital, and for financial support for himself and his family when fishing is not possible. The middleman either takes over the whole of the catch from the fisherman at a fixed price, or sells it for him on a commission basis. His function is clearly a valuable one, particularly in primitive fishing communities, where transport facilities are poor and the fishermen have little, if any, education. The middleman, or moneylender as he is often termed, although this is only one of his functions, has, however, acquired a bad reputation in many instances, and one of the objectives of many credit assistance schemes in developing countries is often to relieve the fisherman of his oppressive debt burden to the middleman.

The middleman provides the bulk of the working capital required by the fisherman, and often consumer goods, on the security of the catch. Funds advanced by the middleman are readily and quickly available to the fisherman without cumbersome formalities, are given without fixed security, and often carry no interest charge as such. Even where other sources of short-term finance have been made available to fishermen, it is worth noting that the use made of the middleman as a financier continues to be substantial.[1] In many instances a fisherman can point to a long history of friendly relations with the middleman and wishes to continue taking advantage of the facilities he offers. The loans made are recovered from the proceeds of sales of the fisherman's catches. The proceeds are calculated either at a price fixed by the middleman or on the price realized on actual sales. In Hong Kong, for example, the middleman takes a commission of generally between 2 and 3 percent on the value of fish sold where no debt is outstanding, but a commission of 6 to 9 percent where a loan is in existence. This difference in fact represents an interest charge. In addition, there may be deductions of a fixed percentage of the value of the catch toward repayment of the loan.

While the above system appears sound, and the amounts of commission probably represent a fair valuation of the important distribution serv-

[1] For details of the relative use made of finance from middlemen and other sources in Hong Kong, and for a general discussion of this problem see *The economic role of middlemen and co-operatives in Indo-Pacific fisheries*, E. F. Szczepanik. FAO, 1960.

ices the middleman performs, the main objection lies in the abuses which have arisen in the operation of the arrangement. The middleman is in a very strong bargaining position with the fisherman. Unless he takes his catch, it will be valueless. In fixing a price, therefore, he can generally quote a figure well below that which he knows the fish is likely to realize on sale. Where he works on a commission basis, it is impossible for the fisherman to check on the correctness of the prices at which the middleman claims he has sold the fish, and serious abuses undoubtedly occur. Even in developed countries, where sales of fish on consignment to inland markets are carried on, disputes often arise as to the correctness of the accounting made by the inland wholesaler to the fisherman at the coast.

A further feature of the middleman system to which objection is made, is the practice of the middleman not to deduct repayment amounts from proceeds, so as to keep the fisherman in a position of indebtedness and to retain the commission on sales of fish at the higher rate of 6 to 9 percent. A persistent state of indebtedness also has an unfortunate disincentive effect on the fisherman, who is less inclined to work hard and to adopt new techniques. This effect may in fact jeopardize the success of a government re-equipment program, unless at the same time assistance is given to the fisherman to remove some or all of his indebtedness to the middleman.

Experience suggests that the answer to this problem is not abolition or prohibition of the middleman system - the economic functions exercised by the middleman are generally too important to allow this to happen without danger to the fishery economy. In general, the solution rather may lie in the introduction of a greater measure of competition in wholesaling and distribution of fish. This may best be achieved by the setting up of a marketing body or institution, under co-operative or government auspices. Experience in Hong Kong suggests that many fishermen, however, will still wish to make use of the services of the traditional middleman. Provided abuses and malpractices can be stamped out, there seems no reason why the middleman should not continue to make his services available for the effective disposal of catches and for the ready and convenient supply of working capital and short-term loans.

One of the principal weapons used by governments, in attempting to stop the abuses of the middleman system, is organization of fishermen on a co-operative basis, for the purposes of marketing of catches, buying

of supplies and equipment, conduct of joint fishing enterprises, supply of credit assistance and the processing of fish. Of these purposes, the first two, marketing and purchasing, are by far the most important. Most co-operative development has originated in one or the other of these fields. They are, of course, not mutually exclusive - many societies combine both marketing and purchasing functions. Credit supply is involved in both functions. The introduction of special credit assistance schemes for re-equipment and modernization, however, in many countries has superimposed on the existing co-operative structure the function of administering special credit assistance as a separate and additional duty, rather than as a routine aspect of the marketing and buying functions, or as a normal part of the operations of a thrift society. In many cases, existing co-operatives (particularly thrift societies) have taken over the function and added it to their activities. The separation of credit functions from marketing or buying has the advantage that specialized attention can be given to credit problems and expert staff can be employed. It has been found in certain countries - Ceylon is an example - that many fishermen join co-operatives for no other reason than to share in the benefits to be obtained from the use of the society's loan capital and do not take part in the other activities of the organization, e.g., do not use the co-operative for marketing their fish. This is a further argument in favor of keeping the administration of special credit funds separate from the general co-operative functions of marketing and buying.

The objects of fishermen's thrift and credit co-operatives are usually:

1. To make possible capital investment in small-scale fishing enterprises and so maintain or improve their efficiency and profitability.

2. To keep fishermen out of the more oppressive forms of indebtedness, particularly those which limit their freedom to purchase supplies or market their catch.

3. To provide opportunities for saving and thus help to make the industry self-financing.

Various types of loans are made, although some types may not be within the scope of a local society. Some loans are long- and medium-term and intended for capital investment, others are short-term for the purchase of supplies or stockholding, and others againo verdrafts on current

account to meet working capital needs. Loans may be in other form than cash. They may take the form of a delivery order, for instance, for equipment. Repayments too, may be credited directly from the proceeds of sales of catches through co-operative channels rather than be made in cash.

The sources of funds of local societies are savings deposits, reserves, and loans from members or from outside sources. Few societies can operate effectively without loans. In developing countries, outside assistance is inevitably required to supplement the modest amounts which the fishermen members are able to contribute to deposits and reserves. Loan funds can be obtained from either nongovernmental institutional sources or from governments. Nongovernmental sources include loans from individual members of a society, loans from commercial banks, and loans from a regional or national co-operative bank. From the point of view of liquidity requirements of the lender, they must normally be of a short-term nature. For longer-term lending, there have been set up in a number of countries co-operative mortgage banks, not purely concerned with fisheries. Other sources of funds are loans from fishermen's professional unions and from co-operative insurance and building societies.

In developing countries, assistance from government resources, both in the form of loan capital and management help, is essential if the co-operative organization is to flourish. Lack of experience in managerial and financial questions on the part of those responsible for running fishery co-operatives has been the most common cause of failure. Fishery co-operatives are faced with the natural hazards of the trade, the lack of experience and education of most fishermen members, the perishable nature of the product and the uncertainty of supplies, the indebtedness of the fishermen tending to apathy and lack of enterprise, and hostility from traditional marketing agents. All these threaten the successful application of co-operative principles, and they can only be overcome by able and determined management secured from outside.

The availability of capital from governmental sources has been a major factor in the development of co-operative organizations. In developing countries, government aid for fishery development has often been channelled through co-operatives, and in certain cases local co-operatives have been set up with the express purpose of acting as a channel for credits to the fishery industry. This was in fact the original position of the French and Japanese fishery societies. Rapid development of co-opera-

tives as a result of government financing may have adverse effects on the morale of the membership and thus on the long-term prospects of sound development on co-operative lines. State aid has been a subject of controversy in the co-operative movement of many countries, since it is considered that it weakens co-operative initiative and responsibility. Against this, it must be pointed out that without aid of this kind fisheries in many developing countries would be unlikely to progress from their present very low standards of initiative and enterprise. Governments provide loan capital for co-operatives either directly or through a specialized agency, such as the State Fishery Bank in Norway. In some cases special banks have been set up, as in France and Japan. In most cases, the national co-operative bank is the point at which government aid reaches the co-operative system.

Methods of provision of agency funds

In discussing the ways in which funds are provided for credit agencies, three main methods can be distinguished:

1. Through lump sum appropriations.
2. Through annual appropriations.
3. Through organization of revolving fund operations.

Funds required by agencies for the purposes of making payments in respect of grants and operational subsidies are normally made available in the form of lump sum appropriations. Both grants and subsidies are directed at certain objectives. In making legislative provisions for them, governments make an estimate of the amounts likely to be required to achieve the objectives and the period over which it is expected assistance in this form will continue to be required. For grants, a total sum is usually provided in the legislation, to be available over a fixed period of years. No fixed annual allocation of this amount is made, as the extent of annual expenditure depends on the response of the industry to the assistance offered. For national accounting purposes, however, it is necessary to make an estimate of expenditure on the grants vote in any one financial year. If expenditure at a later date is found to exceed this figure, a supplementary vote will be necessary. This require-

ment is entirely due to national accounting procedures and does not affect the general principle of a lump sum appropriation.

A problem may arise for the lending agency, however, if through inflation or for other reasons, the lump sum is being spent at a rate which, if continued, will mean the exhaustion of the appropriation before the expiry date fixed by statute. It may then be necessary to curtail annual expenditure artificially, by restricting aid to a limited number of recipients or projects or to ask for statutory provision of additional funds. This, however, is a matter for the agency administration to determine in the first instance, in the light of the progress made toward achieving the objectives of the grant assistance.

Similarly, in the case of operational subsidies, a lump sum appropriation system is the most common. If the subsidy is intended to be a temporary measure, the life of the appropriation may be quite short, possibly not more than two or three years. Annual estimates are again necessary for government accounting purposes. Annual expenditure may be more closely controlled than in the case of grants if, as is often the case, the subsidy is paid on the basis of need. A formula of subsidy aid which allows the annual expenditure to be estimated within narrow limits may be determined by the government.

Where loans are made available to the agency from government sources, all three of the above methods of provision are used. The most common, however, are the lump sum appropriation and the revolving fund systems. Under the lump sum appropriation, limits as to amount and period are set, within which the agency must work. The amount is generally related to the level of outstanding loan balances rather than to the aggregate loans issued. Provided this limit of loan balances is set at a reasonably high level and the period for which assistance is provided is long, the agency is normally able to meet loan demands under the assistance program, independently of the rate of repayments.

Under the revolving fund system, all repayments go back into a fund and are available for loans to new applicants. There is, in fact, a limit set to loans, but instead of being a fixed cash amount as in the lump sum system, it is directly related (*a*) to the initial size of the revolving fund; and (*b*) to the rate of repayment. Under this system, if repayments are not made, or are seriously delayed, new lending is curtailed, with unfortunate effects on the assistance program, unless the size of the fund is increased to meet the difficulty. At times of economic crisis, there is a tendency for the demand for loans to increase, because of the

difficulty of obtaining loan facilities from other sources, so that curtailment of ability to lend is doubly unfortunate. Most revolving funds have a limit set to their operative life.

The annual appropriation system is little used, as the uncertainty as to the amount of future aid is likely to lead to borrowers taking immediate advantage of the assistance offered when, in the light of their financial position, they might be better advised to postpone investment. Distortion of investment and development may easily arise as a result of this. Under all these systems, where funds are taken from the national treasury, the needs of national accounting procedures for annual estimates of expenditure, described above, must be met. Where an agency draws its funds from sources other than government funds, for example, by the issue of bonds or debentures on the capital market, its lending policies must have regard to the total amounts available to it from such borrowing and to the repayment terms.

Whatever the methods of provision of funds, it is important that the industry knows how much, and for how long, credit is at its disposal.

7. ADMINISTRATION OF AID SCHEMES

The method of administration of aid schemes differs according to the classes of recipients which are the subject of aid. The problems which arise in dealing with assistance to individual fishermen differ from those relating to partnerships, companies and co-operatives. In general, however, the variations in the technique of administration relate to matters of detail only. This chapter will deal for the most part with the principles of administration applicable generally, drawing attention, however, to important variations appropriate in dealing with differing types of organization. Variations will also occur in relation to the differing purposes of financial aid. Short-term finance for a limited purpose, for example, the supplying of minor items of fishing gear to coastal fishermen, will clearly require a far less elaborate system of administration than will long-term financial assistance applied for major projects, such as fleet re-equipment, throughout the national fishery industry or large sections of it.

The applicant

It is true of most aid schemes that the statutory or legal provisions governing their administration are quite specific in defining the classes of applicants who may be eligible. Administration is rendered far easier if clearly defined rules are laid down, so that would-be applicants can be certain as to whether or not they qualify for assistance. It will no doubt be true that however clearly the eligibility rules are laid down, applications will be received by the administering authority from persons who are ineligible. Such applications, however, will be in a minority. Furthermore, the existence of a clear set of rules will permit preliminary screening by clerical labor, reducing to a minimum the cost of rejec-

tion. Quite apart from the advantage of relieving the administering authority from having to take policy decisions on eligibility on every individual application, a set of rules governing eligibility should form the basis of any credit policy. The objectives of a financial assistance program in terms of the classes of applicants to be aided, and the needs which it is proposed to meet, should be set down at the primary stage of determination of policy and should represent the sole justification for any aid scheme.

It is probable that however closely eligible classes are defined in schemes, there may be borderline cases on which administration decisions have to be taken. For example, a scheme may limit assistance to bona fide fishermen. The administration may have to decide for itself how to interpret this concept and what criteria it will use in determining whether or not an individual satisfies this definition. Again, in the scheme at present in operation in the United Kingdom, certain types of aid are available only to fishermen who are working owners. A working owner is defined for this purpose as a person who, being the owner or one of the owners of a vessel, regularly goes to sea in it when it is used for fishing purposes. The administering authority must decide in individual cases whether an applicant satisfies this definition and, in particular, whether he fishes sufficiently often to bring him within the scope of the assistance.

It is generally considered that the assessment of the quality of the applicant is one of the most, if not the most, important element in the successful administration of financial aid schemes. Although forms of legal security may be taken by lending agencies, the applicant's own character, ability and diligence are the primary factors which will determine whether financial assistance is successful in meeting its objectives. It follows that the necessary investigation of the applicant must be carried out carefully. It can be dealt with under three main headings:

1. The applicant's personal circumstances, i.e., age, nationality, family circumstances, character and eligibility under the scheme.

2. The applicant's technical qualifications, i. e., his fishing ability and experience, the type and amount of fishing gear and equipment owned, and the type of fishing operations he intends to carry out in the future.

3. The applicant's financial position, i.e., a statement of his financial assets and liabilities, his earnings record, details of any previous financial assistance he may have received, his performance in meeting his obligations in respect of it, and his present cash resources available to meet his own contribution toward the cost of the project.

The age and family circumstances of an applicant are important elements in the consideration of his case. In many countries applications from persons under 21 years of age encounter legal difficulties connected with the powers of minors to enter into legal undertakings. Aid to such persons, consequently, cannot be given, unless a third party is brought in to supply additional security. The age of an applicant is also of significance in relation to the length of the period over which financial assistance is required or can be given. In general, the policy should be to ensure that a man's financial liabilities do not extend beyond a reasonable estimate of his working life, unless the application is a joint one with younger men who would be able to continue meeting the financial commitments beyond that time as partners. In some countries of west and central Africa, it is found to be of importance to include particulars of the wives of fishermen in investigations, since they are frequently business associates of their husbands and play an important part in the processing and marketing of catches.

In considering the extent of an applicant's cash resources for meeting the initial cost of a project, it has been found important to ensure that his funds exceed the amount immediately required for his own contribution toward the cost of the facilities for which loan assistance is requested. It may well happen that a new vessel or a new piece of equipment may not operate initially as well as had been anticipated, so that earnings may be reduced with serious effects on the fisherman's ability to repay the appropriate capital and interest payments when they fall due. The possession of a financial "cushion" is intended to meet eventualities of this kind.

It is highly desirable that the initial investigation of the applicant should be carried out at a local level. In many schemes, the administering agency employs field officers to carry out this work. In some countries, however, committees are used. In France, such committees are organized on a regional basis. The committee system may be said to have an advantage in that a number of separate opinions are available about the applicant's qualifications and suitability for aid. It has, however,

been suggested that committees, particularly if organized on a local basis, may deliberately or unconsciously introduce bias into their decisions. This might in the end give rise to a demand for some form of appeal tribunal to which decisions of committees can be taken by applicants who feel aggrieved by them. In many developing countries, it has been found impossible to develop a system of committee investigation, because persons of the caliber required for such work are not readily available in local fishing communities.

The stage to which the field officer will carry his investigation will generally depend on the importance and size of the project. As a rule, his responsibility extends at least to the investigation of the personal characteristics and technical competence of an applicant. In these fields, personal knowledge is invaluable and any gaps in information should be bridged by local inquiries, which the field officer is best constituted to make. As regards the financial investigation, the field officer can normally deal with projects involving relatively small sums. If the amounts involved are large or the applicant's financial position complicated, the field officer may wish to request expert aid from the lending agency. One serious problem in dealing with the financial position of applicants, particularly the smaller types of fishermen, is the inadequate state of financial records available for study. The field officer in such cases has to use his judgment and arrive at a decision on the basis of whatever information is available to him.

If the applicant is a company, firm or co-operative society, the investigating procedure is rather different. Most of the information required is in documentary form and can be studied centrally by appropriate experts of the lending agency. Among the information required from companies are the memorandums and articles of association, list of directors, history of the organization, published accounts extending back over a reasonable period, a banker's reference, and full details of the project for which assistance is required. The field officer may only be involved in company investigations in filling in, on the the basis of his local knowledge, the prospects of economic success of a proposed project.

In considering applications for assistance, a problem often arises in dealing with newcomers to the industry who wish to take advantage of the financial assistance available. Certain schemes may exclude from consideration persons who have not had previous experience of fishery activities. In developing countries, the fishing community may, in fact, be a closed one, because of ethnic or religious considerations. How-

ever, where there is no bar to applicants without previous experience, it is often necessary to proceed with caution in counselling such applicants. In many cases, a newcomer possesses adequate capital to finance his share of a project, but his lack of experience may make his chances of success doubtful. It may, therefore, be advisable to encourage such persons to spend a preliminary period in the industry in a subordinate capacity, which would enable them to gain the necessary experience and to decide at a later stage whether they would wish to proceed in their intention to enter the industry on their own account.

Where limited companies with adequate capital resources are interested in the fishery field, the knowledge that financial assistance is available to the industry may enhance the stimulus to invest. Again, it is desirable not to encourage such new entrants until they have taken advice from well-established organizations within the industry and have thus been able to assess more closely the prospects of success. Newcomers of this kind often serve a very useful purpose, however, in encouraging development in areas where, for a number of reasons, local fishery enterprises have failed to take advantage of the financial assistance available to them. As in most other spheres of economic activity, it is rarely advisable to keep out newcomers altogether, but in view of the special conditions which have given rise to the need for financial assistance to the industry, or sectors of it, some screening is indispensable.

The extensive range of inquiries which the field officers of an agency have to carry out in connection with aid schemes indicates that these officers must have a number of basic attributes which may be very difficult to find in full measure in any one individual. Besides a good basic education, they must build up a close knowledge of the area in which they are working, as well of the fishery and the men, and the fishery enterprises in it. They must have complete integrity and impartiality toward applicants, and the necessary tact for asking questions about personal circumstances and financial resources without causing resentment. In addition, they must be able to submit clear and concise reports and express a definite opinion on whether or not particular applicants should be given financial aid. It is clearly impossible to list these qualities in any order of importance. Many of them at any rate are not easily acquired by training and instruction. If local field officers with these abilities cannot easily be found, it may be preferable to let the central lending agency do the investigating. In principle, this is undesirable, since it adds to administrative costs, and the advantage of the close re-

lationship that the field officer can normally establish with an applicant is lost. Another alternative is to delegate inquiries to local co-operative channels. In Japan, most credit investigations are carried out primarily through local co-operative bodies. At times, local branches of commercial banks are asked to assist in investigations and receive a fee for their services. Japanese experience has shown that in this way it has been possible to preserve the advantages of decentralization in operation, while keeping the dispensing of funds in the hands of a central authority.

The project

Verification of the technical suitability of the project for which financial aid is requested is a part of the credit investigation, comparable in importance to the investigation of the applicant's personal and financial circumstances. An applicant should submit detailed plans and specifications of his project. The study of these will necessitate the employment of technical experts by the lending agency. These experts will normally have to be qualified naval architects or marine engineers. Ideally, a number of competitive tenders should be submitted, so that a proper assessment of the reasonableness of the prices quoted for the work can be made by the technical officers. Where an extensive aid scheme has been introduced in a country where facilities for the building or re-engining of fishing vessels are limited, building prices may tend to rise rapidly if there is a sudden and large response from the industry to take advantage of the assistance. There is a danger, in such cases, that the financial benefits offered to the fishermen may be swallowed up in meeting inflated prices for new vessels or equipment.

In submitting the tenders that have been made by the builders, the applicant may express a preference for a particular tender, which may not necessarily be the lowest one. His preference may be due to a number of reasons - the proximity of the builder, which would facilitate supervision; his knowledge of the standard of workmanship of the builder, based on personal experience or on the builder's general reputation; or the better delivery terms offered. In principle, it is desirable to respect the fisherman's wishes in this matter, as confidence in the craft or equipment built is a very potent factor in his successful operation of it. If the price quoted by the preferred contractor is greatly in excess of the other tenders, without reasonable justification in terms of differ-

ences in specification, it may be necessary to limit the credit assistance available to the lowest tendered price and require the applicant to pay the balance from his own resources. If the price differences are small, however, and the reasons for preference of one builder against the others are considered sound, assistance should be given on the basis of the tender preferred by the loan applicant.

There may be difficulties in obtaining competitive tenders in certain cases, particularly for the larger types of new fishing vessels or for large processing plants, where the preparation of detailed plans, specifications and tenders (and possibly bills of quantities) is a long, involved and expensive operation. Unless the builder or contractor feels that he has a reasonable chance of securing the contract, he may be disinclined to involve himself in tendering. Furthermore, insistence on competitive tenders in such cases may simply lead to collusion between builders, the one favored by the applicant arranging to obtain nominal quotations from other builders, obviously at substantially higher prices than he is himself quoting for the work. Even if the agency itself were to secure the tenders, it is difficult to overcome this danger. In such circumstances, i.e., for the larger constructional work, it may be preferable to rely on the knowledge and experience of the agency's technical staff in deciding whether the quoted price is reasonable in relation to the specifications for the work. The skill and experience of its technical staff, too, are the principal safeguards the agency has against possible collusion between owner and builder in quoting an inflated price in order to secure additional financial aid. The danger of practices of this kind is greater where grant assistance is being offered.

Where an applicant is proposing to carry out work using his own labor, the cost of such labor should be disallowed for aid purposes. The technical staff will also need to be assured that the applicant is able to satisfactorily operate the facilities to be built. Similarly, where a company applying for assistance is connected financially with the contractor whom it is proposed to employ, a careful check must be made on the quoted price and no profit element should be allowed.

In considering plans and specifications submitted to it, the lending agency may find it necessary to have amendments made to bring them into line with required standards of construction and possibly to alter features which have proved to be unsatisfactory, or which are considered unsuitable for the particular purpose for which the project is intended. Engine power may be felt to be inadequate for the type of fish-

ing for which a particular hull is required; the electronic devices specified may be unsuitable; or a proposed cold store may have insufficient insulation to hold the quantity of fish for which it is planned, at a sufficiently low temperature. On matters of this kind, which affect the prospects of success of the project and thus the security for the loan, the agency must insist on the appropriate changes in the specifications. The agency must, however, guard against making changes in basic design. In developed countries, the larger operators, often with expert technical staff of their own, have very clear ideas of the type of vessels and equipment they need. In general, revisions of plans and specifications should only be required in such cases in matters of detail. Even here, it is general practice for such detailed alterations to be made in consultation with the applicants.

The smaller fishermen in developed fisheries, although in many cases not technically expert, also have very definite ideas of their needs. Again, alterations to specifications should, if possible, only be made in consultation and agreement with them. If the agency insists on making basic alterations against the wishes and advice of the fishermen and builders, the success of the project will become partly the responsibility of the agency. Blame for failure or lack of anticipated success will be attributed, possibly quite wrongly, to the agency, because of the alterations it had insisted on making. Moreover, the fisherman may have far less confidence in operating a vessel which he feels, again possibly quite wrongly, is not the most suitable for his needs. In developing countries, on the other hand, guidance in basic design and indication of suitability for the purposes intended is generally expected from the technical experts of the credit agency. As development and technical knowledge grows, the operator's own views, ideas and inclinations must be given more weight in decisions on the final form of plans and specifications.

In an effort to counter rapidly rising costs of vessel building and equipment in most developed countries, brought about largely as a result of the postwar inflationary conditions, but also partly by the very large increase in demand for shipbuilding services that extensive fishery aid schemes have created, consideration has been given to the possibility of evolving standard designs of vessels. Progress on these lines has been slow, because most owners of the larger types of vessels are strongly individualistic in tradition and outlook and do not react kindly to suggestions that their new vessels should be of a standard design. They

also claim that such a development would be unwelcome to their skippers and crews. Moreover, there appears little prospect of owners agreeing on the particular design which should be adopted as the standard, even if they were to accept the principle of standardization. The extent of the cost reductions that might be realized through standardization is also questionable. In a developed industry, a considerable number of different sizes and designs would have to be considered to meet the requirements of the various sections of the industry. Builders, while agreeing that some savings would be realized, have not been overoptimistic in their assessment of the size of the financial savings that would result. Experience in comparing the prices quoted for individual vessels with those for a multiple order for several vessels of the same design indicates that the savings are very modest indeed. On balance, they would scarcely justify that owners abandon their ideas about the design of individual vessels. Substantial reductions in construction cost are more likely to come about as the result of the introduction by the ship- and boatbuilding industry of new techniques, such as prefabrication of hulls, and of the development of new materials, such as fiber glass for smaller vessels, making possible the use of molds.

In developing countries, standardization is generally at the basis of fleet development and re-equipment. It is important that this should be so in order to make the task of education of the fishermen in the handling and maintenance of vessels and equipment as simple as possible. A multiplicity of designs should only come about at a later stage, when the fishery has developed along a number of separate lines. Even then every effort should be made to keep variations to the minimum necessary for efficiency and proper exploitation of the fishery.

In order to facilitate the production and inspection of wooden fishing vessels in Scotland, the Scottish Committee of the White Fish Authority produced in September 1960 standard specifications for Scottish wooden fishing vessels within the length range of 30 to 90 feet.[1] These were prepared by a working party of the technical officers of the committee and of the representatives of the boatbuilders' association. They cover such matters as the spacing of frames and beams, the thickness of planking, the size of rudder, type and diameter of bolts, the

[1] *Standard specifications for the construction of Scottish wooden fishing vessels*, White Fish Authority, Committee for Scotland and Northern Ireland. Edinburgh, 1960.

equipment of the vessel, etc. It is emphasized that the standards prescribed are the minimum desirable. Building to at least these minima has by now, however, become a condition for the giving of financial assistance toward the cost of the vessel. This development is a sound and interesting one, which might usefully be adopted in other countries, particularly where boatbuilders may have little experience in fishing vessel construction or are of limited technical competence. One danger that has to be overcome is that the minimum standards may also become the maximum, so that a standard, necessarily fixed at not too high a level for this purpose, may become general practice and the better yards may be discouraged from improving designs or construction methods. The answer to this may well be the periodic review of the standards, with the intention of gradually raising their level over a period of years.

Re-engining applications necessitate, in addition to the specifications of the work to be carried out and details of the engine proposed to be installed, a physical survey of the hull by technical officers to determine its fitness and suitability for the new engine. Limited funds may require an age limit to be put on hulls qualifying for assistance. Wooden hulls over 25 years may be found in general to be unsuitable, although some hulls built as long as 50 years ago and well maintained throughout their life may still merit re-engining in exceptional cases. In developing countries, where most engine installation is in hulls which have not previously been mechanized, the question of soundness of construction and suitability for the proposed engine is a far more basic one, which must be answered with the greatest care by the technical expert.

In approving engines, the lending agency must also ensure that, besides suitability for fishing use, the engine is supported by a satisfactory service and spare parts organization. For the small fisherman in a remote fishing village, an engine breakdown can be a serious threat to his livelihood if it cannot be dealt with speedily and satisfactorily.

Most national schemes of financial assistance in developed countries insist that the vessel or equipment for which aid is given shall be built or manufactured within the country. Administrative problems arise under these provisions in connection with component parts which an owner may wish to obtain from abroad. Provided these parts represent only a minor part of the total cost of the project, and supply from abroad can be justified either on the grounds of economy or because an equally effective part is not produced at home, approval is usually given. With

the increasing tendency toward international economic groupings, there may shortly be a large extension in international traffic in fishing vessels and equipment, which may well be to the advantage of the fishery industry, both as regards cost and efficiency.

The treatment of innovation and experimental and novel features in projects submitted to lending agencies for approval gives rise to some administrative difficulty. The agency's security is represented, in most schemes, mainly by a charge on the vessel or equipment for which the financial assistance is given. In considering new and untried designs or equipment, therefore, the agency must have primary regard to the likely effect of these on the value of its security. However, with the rapidly changing technological conditions in most fisheries, innovations must be encouraged in the long-term interests both of the industry and the agency. The encouragement of continued investment in vessels which are rapidly becoming obsolete can only bring future difficulties for all concerned. Some provision should, however, be made for the testing of new prototypes and ideas outside the framework of aid schemes, under a program of research and technical development. Once an innovation has been found effective and satisfactory in service, it may then be accepted for adoption in aided projects. Although definition is difficult, in practice, it is rarely hard to distinguish between a new experimental feature, which should be made the subject of prototype research, and an innovation, already tested but not yet incorporated in a commercial vessel. In most developed countries, the attitude taken toward innovation is liberal. In the United States, it is sufficient that equipment is found serviceable in the course of an experimental cruise for it to be approved for financial assistance. In the United Kingdom, it has often happened that well-established engines have been developed or adapted for marine use. Workshop and bench tests are made on such units wherever possible, but installation of an initial model in a fishing vessel is allowed only subject to the manufacturer undertaking to meet the costs of removing it if it should prove unsatisfactory in operation.

The giving of financial aid to research on, and development of, innovations is a common feature of fishery policies. Apart from the services of experts and scientists in government or institutional research establishments, direct financial aid is often given toward the cost of specific projects carried on by fishermen or fishery organizations. In Belgium, for example, losses incurred in connection with experimental fishing may

be recovered from the government. Financial aid may also be extended by the government to shipbuilders to encourage the introduction of improved equipment. Thus a rebate of interest is allowed to the shipbuilders if loans have to be secured for these purposes.

In the United Kingdom, a number of joint research projects have been set up, with financial contributions from the industry, the government, and the White Fish Authority. These include experimental work on freezing fish at sea, on new types of trawl gear, and on the construction of prototype freezer vessels.

In certain circumstances, it may be necessary to put some restraint on the adoption of new ideas, if overdevelopment along new, and perhaps extremely profitable, lines is threatened. Overenthusiasm and uncontrolled expansion is a possible consequence of successful experimental work, and it may well occur before the experimental work has been effectively completed. Initial sea tests of new equipment may be highly successful, but part of the success may be due to the special qualities of the ship or the crew carrying out the tests. It is dangerous to allow initial tests of this kind to influence policy toward innovations, until enough tests have been made to give scientifically reliable results. Wherever possible, new ideas should be tried out on as large a pilot scale as possible, to reduce the danger of drawing wrong conclusions on their effectiveness. In developing countries, innovation is the basis of fishery development. Progress will depend very largely on the successful application of innovation to often primitive methods. For this reason, it is even more important that adequate research and testing should be carried out before decisions are taken about the desirability of introducing new equipment of particular kinds. Technical and scientific assistance has been made available to many developing countries for this purpose under the auspices of FAO and other agencies.

In addition to the need of developing countries for technical and scientific help in research work, there is the far wider and more urgent need for training and education of applicants (*a*) in the opportunities available to them under financial aid schemes; (*b*) in the working of the aid machinery so as to create an awareness of their obligations under the credit contract or agreement; and (*c*) in the use of the facilities and equipment made available through financial aid schemes. These problems can be illustrated by experience in Senegal, where religious and tribal taboos impeded recruitment of crews for fishing vessels, and lack of familiarity with improved craft and gear caused fishermen to venture too

far out to sea and to be shipwrecked. These difficulties were overcome by obtaining the confidence of the tribal and religious chiefs and by explaining to the fishermen the benefits and limitations of their new equipment. The needs for training and education in the use and maintenance of new equipment are probably as pressing as the need for capital in most developing countries. Much useful work is being done by international agencies, and technical help is being made available by industrial concerns in the supplying countries. A large order for vessels, for instance, was recently placed in the United Kingdom by the Government of Ghana. Ghanaian personnel are being trained in the operation of vessels of this kind by British trawler-owning concerns, and technical and administrative help from these concerns in the shape of temporary secondment of senior staff for duty in Ghana is at present being organized.

Much more assistance of this kind is urgently needed for fisheries in developing countries. It seems probable that it could be applied more rapidly and effectively if its organization could be developed on an international basis; in the long run, the systematic supply of technical and administrative know-how might be far more productive than simple transfers of money. A study of the technical assistance given by the United Kingdom for overseas development shows that while large sums of money are expended annually on the recruitment and training of public servants and experts, and on advice, research and assistance on development problems of all kinds, a very small proportion is applied to fisheries. It may be that sufficient stress is not being laid by the developing countries on their fishery needs. If so, some external pressures are perhaps required to impress upon them the benefits likely to accrue from increased training, education and research in the fisheries field.

Conditions of approval

The inquiries relating to the applicant and the project having been successfully completed, a decision has to be made on whether financial assistance is to be approved and, if so, on what terms and conditions. Reference has already been made to the use of local fisheries committees in Norway for the screening of applicants. These committees have to consider a comprehensive set of criteria relating to character and qualifications of applicants and the nature of the project, as well as to

such factors of general importance as the need for the vessel itself, the availability of a crew to man it, and of working capital with which to operate it. The local committee's findings are submitted to an appraisal committee of the State Bank for decision.

The importance of these various criteria is to some extent related to the stage of development and to objectives of policy. Where the primary objective is development of the fisheries for social reasons, proof that successful use can be made of the facilities applied for is the most important consideration. Where the fisheries are more developed, and economic efficiency, earnings and return on capital are emphasized, the character of the security becomes more important.

In summarizing, the requirements for approval can be stated as follows:

1. Compliance by the applicant with the various rules as regards nationality, eligibility, etc., of the financial assistance regulations.

2. A satisfactory report on the applicant's general and personal circumstances, character and ability.

3. A satisfactory report on the applicant's financial position, showing liquid resources sufficient to meet his own contribution toward the cost of the project and to provide reasonable working capital for the initial stages of operation.

4. A satisfactory report on the technical aspects of the application.

5. Compliance of the application with the general policy objectives of the assistance agency.

In the Norwegian system of administration, these reports are assembled by an appraisal committee. Where the committee system is not used, the internal administrative system of the assistance agency must provide for the summarization of the particulars of the application and its submission to the officer or body within the agency authorized to make a decision on the giving of financial aid. It is generally found that authority to approve is delegated within an agency. The various grades of officers are authorized to issue approvals up to certain cost limits, while the largest projects may have to be approved by the board or governing committee of the agency. Approval is given on certain conditions. These relate to the security to be given for the money to be ad-

vanced, and the effective operation of the project. Typical conditions laid down in schemes currently in operation are:

1. A mortgage or charge on the vessel or other object for which the loan is made.
2. A mortgage or charge on other property.
3. Obtaining of sureties or guarantees from individuals, co-operative societies, banks, or parent companies.
4. Insuring of the mortgaged assets against all risks.
5. Acceptance of joint and several liability by partners in a venture.
6. Restriction of the right of firms or companies to repay loan capital without the approval of the lending agency.
7. Taking out of a life insurance policy on the applicant.

In most schemes operating in developed countries, a mortgage on the asset is required. Additional collateral security may be demanded in certain cases in the form of a charge on property or other assets of the applicant. This may be necessary where a re-engining loan is made and the vessel in question is already charged to another body or agency as security for a previous loan or advance. Where applicants are partners, acceptance of joint and several liability is generally required. It is generally, but not invariably, a condition that the charged assets shall be insured against loss, destruction or damage, from whatever cause.

The requirement for guarantees or sureties may be in addition to, or in substitution for, a mortgage or charge on property. Guarantees may well be demanded as additional security, where the applicant is young and relatively inexperienced, and are generally forthcoming from more senior members of his family. Where an applicant is a subsidiary company, guarantees are normally required from its parent. In developing countries, it is often found that sureties or guarantees are accepted in lieu of mortgages or charges on property. This is so in Burma and Hong Kong.

Among general conditions of approval which are directed at securing effective operation and management are:

1. Classification of the larger vessels with an approved classification society, in order to secure certain minimum construction standards and to guarantee periodic inspection and maintenance standards.

2. Payment by the applicant of his own contribution as a prior condition of financial assistance.
3. Keeping and submission of financial and operating records in an approved form.
4. Fixing of a minimum annual rate of depreciation to be applied to the asset, to ensure a conservative financial policy in this matter.
5. Naming of a manager or management company to operate the vessel, to ensure efficient management in cases where an application is made by an individual or company not directly concerned in vessel operation.

Where a loan is made to an applicant in respect of an asset of which he is only a part-owner, it is desirable to attach the other part-owners to the transaction by requiring them to undertake to join with the lending agency in the realization of the asset in the event of default by the borrower.

The preference in many developing countries for a system of sureties or guarantors, rather than relying on charges on property, is due largely to the small scale of property ownership in the typical fishing community and the administrative difficulties in carrying out the legal and clerical work of drawing up charges. As has been already pointed out, where aid is given mainly for reasons of social welfare and development, the lending agency has to rely primarily on the successfull use of the equipment and the improved economic circumstances of the borrower resulting from its successful use, to secure due repayment of the money advanced. A system of sureties also has the advantage of knitting a fishing community even more closely together and encouraging co-operation in matters of fishing practices, marketing, etc., which again can only have the effect of increasing the welfare and productivity of the community. If the surety system is to possess even limited value in securing money advanced to fishermen, the agency must pay careful attention to the standing of the sureties nominated. Without supervision, it is quite probable that a surety system might result in the fishermen in a community arranging to give each other guarantees, so that the net effect on the security of the lending agency is nil. Local supervision of applications can do much to avoid this danger, and a check of sureties nominated should also be made by the lending agency, to ensure that they are not " men of straw." Where referees are required to give a testimonial on behalf of an applicant,

a similar check should be made to ensure that the referee is a man of standing. It has been known that on occasion referees nominated have themselves defaulted on loan obligations to the agency. References from salesmen or boatbuilders with a direct financial interest in the application should not be accepted.

The insuring or guaranteeing of loans from private sources has already been discussed in chapter 5[2] dealing with the various forms of assistance. In some countries, loan institutions obtain mutual guarantees from groups or associations of fishermen, either additional to, or in substitution of, individual guarantees or charges. In France, for example, guarantee funds are accumulated by co-operative societies through deductions from the sales proceeds of their members, and made available to meet defaults.

In Japan, too, fishermen's co-operatives often provide collective security on loans extended to their members, since many of the latter do not own boats nor have other chargeable property. In 1952, the Small and Medium Fisheries Financial Guarantee system was introduced in Japan, for the purpose of facilitating mechanization of fishing vessels and extension of their operations to more distant fishing grounds. Under this system, fishery co-operatives, in co-operation with local government and independent fishermen, have set up associations guaranteeing loans. The pledges of these associations are in turn guaranteed by the government.

Another method of joint guarantees is the grouping of borrowers, whereby, although each borrower receives a separate loan, the members are jointly and severally liable for the repayment of all the loans made to the group. Systems of this kind are, of course, more necessary where loan money has to be obtained from normal commercial sources (and where adequate security must be provided before the advances are granted) than where it is supplied through governmental or other special institutional channels. This does not mean that the latter bodies should not aim at obtaining as good security as possible for the loan money, which has been made available by the community of taxpayers as a whole.

The requirement to insure the vessel or equipment upon which money has been advanced and secured is general but not universal. Where insurance facilities are available, it is sound and prudent business practice to take out insurance cover on equipment, which is the security for loans, against the risk of loss and damage. Unfortunately, insurance of fishing

[2] See p. 28.

vessels and equipment constitutes only a small and specialized branch of the general marine insurance field, and fishing vessels as a class have not proved to be good risks. Because of the nature of fishing operations, they are more liable to be lost or sustain damage. They often fish in dangerous waters, in bad weather conditions, and close to coastlines. They are less maneuverable when their gear is in use, and they carry only a limited number of qualified officers. The loss and damage record of fishing vessels is thus not good. Marine insurers, with only a limited knowledge of the industry, tend to rate the risks high and quote a substantial premium for cover. The fisherman, on the other hand, cannot obtain insurance cover against consequential losses, such as loss of fishing time through damage or breakdown and lay-up for repair or deterioration of catch and loss of earnings which may result from delays due to breakdown. Because of the very high rates of premium charged, particularly on the smaller vessels which are not equipped with modern navigational aids, coastal fishermen have been accustomed to operating without insurance cover. When they are informed that, as a condition of receiving financial assistance, they must take out full insurance cover against all marine risks, and that the annual cost will be substantial in relation to their earnings and the insured value of the vessel, they are naturally perturbed and may in extreme cases prefer to dispense with financial aid in order to avoid this new charge on vessel earnings.

These circumstances justify strong efforts to bring about a reduction of commercial premium levels, by special arrangements aimed at spreading the risks over as large a number of vessels as possible. Many schemes, mainly organized under the auspices of co-operative or mutual insurance societies, have been introduced, and have resulted in very substantial reductions in the average premium rates charged, particularly for the smaller classes of vessels. However, the benefits of mutual insurance have not been confined to these classes. The large British distant water fleet is insured in mutual organizations with great benefit to its owners. There is the initial problem of building up a reserve fund to meet claims. Once this has been overcome, the schemes operate very successfully.

It has been suggested that insurance requirements could be dispensed with by a lending agency, and the chance of loss or damage accepted as part of the cost of administration of a scheme, in the same way as bad debts are treated. The cost of claims would, of course, have to be met from a reserve fund, which could be built up either by charging an extra margin on interest rates or by debiting each fisherman with an additional

amount on his loan account, which would not be paid to him, however, but transferred to a reserve fund. In the United Kingdom, some thought has been given to the possibility of the lending agency, the White Fish Authority, insuring all its financially assisted coastal vessels. Although attractive rates were quoted to it by a number of marine insurance brokers, they were not greatly different from the rates currently in force in the mutual societies. As many of the aided boats were already members of the mutuals, an official scheme would have seriously depleted their membership and threatened their rate structure. For this reason, the proposal was not further considered.

In view of the shortcomings of commercial insurance in relation to fishing vessel risks, both because of the rates quoted and because conventional insurance does not cover certain serious risks to which fishermen are exposed, namely loss of fishing time and deterioration of catch, it is imperative that credit schemes which require insurance of charged assets should provide, within their own framework if necessary, a system of mutual insurance to bring premium rates down to a level which the fisherman can accept as a reasonable charge on his earnings. Mutual funds of this kind might well receive official financial assistance in building up initial reserve funds to meet abnormal claims. In whatever way it may be felt best to secure the fisherman's and the agency's interests against loss or damage to vessels and equipment, it is clearly desirable to educate the fisherman concerning the role that insurance, in whatever form it is obtained, can play in protecting him against the very real hazards of his occupation. Eventually this may help to overcome the shortsighted but ingrained disinclination of many men to safeguard their means of livelihood.

Inspection, and payment of assistance

During the course of vessel construction or other work toward the cost of which financial assistance is being made available, the lending agency's technical officers should make periodic inspections, to ensure that the approved specification is being adhered to and to certify that stage payments due under the contract with the builder or contractor may be made. Most contracts for the building of fishing vessels specify a number of stages at which parts of the total contract price become due.

A typical contract for the smaller wooden vessels provides for pay-

ments at the following five stages of construction: (*i*) signing of the contract; (*ii*) keel laying; (*iii*) completion of planking; (*iv*) installation of the engine; and (*v*) completion of acceptance trials. For larger steel vessels, similar forms of contract will apply, with typical stage payments at the signing of the contract, keel laying, completion of framing, completion of plating, launching, and completion of acceptance trials.

Differing views are held on whether or not the credit agency should be a party to the building contract. Where vessels and equipment are to be supplied to fishermen on hire purchase arrangements, the agency must of necessity enter into direct contractual relations with the suppliers and take possession of the property. Where, however, it is acting simply as a financing agency by supplying the appropriate cash payments when due, it is considered preferable for the contract to be made between the builder or supplier and the fisherman, with appropriate provisos that the agency shall be allowed to visit the builder's yard during construction and that the vessel or equipment shall be insured during construction to the agency's satisfaction. Where the contract is for the installation of an engine, the stage payments are, of course, fewer in number, and technical inspection, after the initial hull survey has been made, is generally confined to trying out the completed installation. Where a building or processing plant is concerned, the procedure is similar to that applying to vessels. The contract is normally between the contractor and the owner, and stage payments are certified for payment by architects or other technically qualified persons. In order to keep adequate control over the work, it is desirable to make it clear to both owner and vessel builder or contractor that departures from the approved specifications are not to be made without the agency's prior approval.

A feature of vessel building contracts which has caused some difficulty in the administration of financial aid schemes is the very common "escalator clause." This provides for variations in the contract price of the vessel in accordance with any changes which may occur in the price of the principal materials used in the construction of the larger vessels, such as steel, and in wages. A formula is set out which converts changes in the price of steel per ton and in hourly wage rates to a cash variation in the vessel's contract price. It is clear that the application of escalator clauses of this nature in a period of rising production costs must lead to significant increases in the final costs of approved construction, for which an agency must make the necessary provision in the allocation of its resources. To the extent that funds are limited, the reserves necessary to meet extra

construction costs must lead to a reduction in the total number of vessels toward the cost of which assistance can be given.

While in a period of heavy pressure on vessel building space the terms of contract can largely be dictated by the builders, a slackening of pressure may make it possible for owners to obtain fixed price contracts. These have the advantage of substituting certainty for uncertainty in assessing financial liabilities in respect of a vessel. Unfortunately, the final result in terms of delivered price may not be very different, as builders, in quoting fixed prices, attempt as far as possible to foresee likely changes in costs of labor and materials, and to take account of such changes when quoting. Responsibility for meeting the contract stage payments is, of course, that of the fisherman or fishing organization signatory to the contract. In practice, it is generally arranged that the credit to be made available is paid direct to the contractor by the agency on receipt of the proper certificate from its technical officers that the appropriate stage has been reached and confirmation from the fisherman that the payment may be made on his behalf. The order of payments is typically that the fisherman's own contribution toward the cost of the project is paid first; thereafter (having seen the receipt for the fisherman's contribution), the agency pays its share. Where both grant and loan assistance is made available, grant is paid before loan, in order to postpone the fisherman's liability to pay interest until as late a stage as possible. Besides being administratively convenient, direct payment of assistance to meet the builder's demands effectively obviates the danger of a diversion of the financial aid into other channels by the fisherman.

While the credit investigation is to ensure as far as possible that the applicant has the necessary cash resources to meet his own contribution, to fit out the vessel with gear, and to supply working capital for an initial period of operation, it sometimes happens that the fisherman's own contribution is obtained, wholly or partly, from resources other than his own. It may be supplied by members of his family, or possibly by the vessel builder, who may be anxious to secure a particular contract to keep his yard and his workmen employed. Provided that this financing does not threaten the agency's security by creating charges on property which may compete with the agency's, and provided that in all other respects the fisherman is a satisfactory recipient of aid, there seems little objection to these procedures.

Assistance is normally given on the cost of the work, as finally ascertained and approved. Unless cost items are specifically excluded, be-

cause they have been incurred without permission or because they do not come within the scope of the aid scheme, the total cost will be the final contract price, including additions due to the application of the escalator clause. Professional fees incurred in the preparation of plans and specifications and any technical fees which the credit agency may charge for the services of its technical officers may also be added.

While direct contractual relationships between owners and builders are generally encouraged in schemes operating in developed countries, in developing countries the responsibility for the contract and supply of vessels and equipment is generally that of the lending agency. The lack of experience of the fisherman in dealing with builders and suppliers is ample justification for this policy, which is applied even if the method of supply to the fisherman by the lending agency is not strictly of the hire purchase type. In South Africa, for example, the Fisheries Development Corporation itself places an order for a vessel or engine of approved design after agreement has been concluded with the African buyer, and arranges for delivery of the boat or engine to the buyer in due course. Even in developed countries, the lending agency may become involved from time to time in direct arrangements with builders or suppliers, athough in general the contracts are made directly between fishermen and suppliers. In Norway, an order has recently been placed by the government for 20 larger-type vessels of between 70 and 110 feet in length. Loans are to be available to approved skippers toward the cost of taking over these vessels in due course. In the United Kingdom, the White Fish Authority was asked by builders to give technical approval to certain vessels they proposed to build in anticipation of orders from fishermen. They wished to do this, because the steady flow of building orders from fishermen (resulting from the credit assistance schemes) was showing signs of falling off, and they naturally wished to keep their yards operating and their labor employed for as long as possible. Technical approval was in fact given to certain vessels, built on speculation, although the Authority did not accept any responsibility for the ultimate disposal of the vessels or commit itself to relaxing its normal rules for approval in respect of any future applicant for assistance who might wish to purchase these vessels.

Loan terms and interest rates

The general terms on which loans are made available to applicants in respect of the proportion of total cost covered by loans, the maximum

period over which they are issued, and the rates of interest charged, have already been described in chapter 5.[3] Assistance to individual borrowers must, of course, be made within the framework of the rules applying in particular schemes. Although maximum entitlements are laid down, it may often be necessary in individual cases to restrict for various reasons the amount of assistance offered. The security which can be offered may be considered inadequate to justify the full percentage of loan assistance. The applicant's previous history of repayment and general performance of obligations under earlier assistance may be poor (but not bad enough to justify outright rejection of his application), or an applicant may be a newcomer to the industry with limited experience and relatively untried at fishing operations. There is, in addition, the common rule in many schemes, which has already been mentioned, that loan assistance should only be given in cases where the applicant's lack of resources or inability to raise funds from elsewhere justify it. A refinement of this arrangement is that the extent of loan assistance should be related to the applicant's cash resources, and that funds should be advanced to cover that portion of costs which he is unable to meet himself.

Where maximum, as opposed to fixed, periods of repayment are laid down for loans made for various purposes, the applicant has the choice of specifying the period within which he wishes to repay the loan. In many schemes, however, interest rates vary according to the period of the loan, and generally (but not invariably) the shorter-term loans carry a somewhat lower rate of interest. Where an applicant has a choice of period, he is, therefore, inclined to elect to pay over a shorter rather than a longer period. In making this choice he may be overoptimistic in his estimate of the profit-earning capacity of his new vessel or equipment. The lending agency must, therefore, make a careful check to satisfy itself that the applicant has reasonable prospects of repaying the loan within the proposed repayment period. If any doubts exist, it should insist on the loan being issued for a longer period than requested by the applicant. Where the interest rate on a short-term loan is lower than that on a longer-term one, default by the borrower on short term which results in the repayment of the loan being spread over a longer period than originally provided for, may involve the agency in a complicated readjustment of his liability for interest. In equity, the borrower in such a case must not be put in a more favored position than a borrower who initially elected to repay

[3] See p. 36-39.

over a longer period and thereby incurred a higher annual interest charge, but who has met his repayment obligations without default. It is for reasons of this kind that many schemes provide for fixed loan repayment periods, according to the purpose for which the loan is required, rather than for maximum periods. The main objection to this system is that it penalizes the fisherman who, by ability and hard work, is able to repay a loan in a shorter time. Even under a fixed period scheme, he will save interest charges by repaying in a shorter period, but he will not receive the benefit of the lower *rate* of interest which may apply to the shorter-term loans.

The wide variation in rates of interest charged on loans under the aid schemes currently in operation has already been noted in chapter 5.[4] Many of the variations are due to differing practices regarding subsidization of rates. The question whether a part of the special aid to fisheries should be in the form of artificially low rates of interest on loans, is one for the government to decide as a matter of policy. Where normal rates of interest apply, however, it is generally found that they conform to the pattern of rates in the economy as a whole. Basically, they are determined by reference to the size of the loan, the period for which the loan is required, and the degree of risk involved. Where funds for the financing of fishery enterprises under a financial aid scheme are centralized in a governmental, statutory or co-operative form of lending agency, the industry's demands are aggregated as regards amount. The risks are substantially reduced because of the large number of separate projects making up the total. Lending agencies, consequently, are able to obtain finance either from government sources or from commercial banking or financial sources at rates comparable to those available to large industrial organizations and local authorities.

In turn, the agency will normally pass on these advantageous rates to aid recipients, but in lending will often add a small percentage to its own borrowing rates, to cover costs of administration and perhaps to build up a reserve fund to meet bad debts resulting from defaults on the part of borrowers, where recovery cannot be made through the realization of the security. Objections may be raised to this addition to lending rates, particularly by the larger recipients of aid, who may claim that they should not be asked to contribute to a reserve fund designed to meet losses due to the default of the weaker elements in the industry.

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[4] See p. 37-38.

It is clearly impracticable from an administrative standpoint to assess the degree of risk in individual cases and to vary interest rates accordingly. It may be argued that in an industry as unpredictable and changeable as fishing, no company or organization can claim to be immune from financial difficulty or disaster. It would be possible to group projects and applicants in a broad classification of risk and vary the rate of interest charged in conformity with this grouping. This is not done, however, not only because of the administrative complications it would involve, but also because the higher risk groups are those most in need of financial assistance on favorable terms.

In borrowing funds from the money market, the agency will have to conform to the prevailing pattern of rates in relation to short- and long-term borrowing. Where rates differ according to the periods for which borrowings are required by the agency, the latter may in turn feel obliged to apply these differences in its own lending. It is generally found, consequently, that rates of interest charged to aid recipients differ according to the period for which loans are required (which in turn in most schemes will be closely related to the purpose for which the money is to be used). Typically, rates for short-term borrowing are rather lower than for long-term borrowing. This situation may on occasion be reversed, however, when temporary financial stringency in a money market or government financial policies may have the effect of forcing short-term rates above the level of long-term rates. This situation prevailed in the United Kingdom in the autumn and winter of 1957, and again in the summer of 1961.

Where, in the absence of subsidization, interest rates on loans to fishery enterprises are related directly to the general level of money rates in a country, changes in that general level must be reflected in the rates charged on fishery loans. The consequent variations in these rates create a number of administrative and financing problems which are extremely difficult to overcome. It is desirable to keep the number of changes in rates to a minimum in the interest of the borrowers. If the money market rates change frequently, however, stability in agency lending rates can only be achieved by some form of equalization fund. The difficulty of achieving this is that an estimate has to be made as to the future course of interest rates as well as an assumption about the "average" level of rates on which to base equalization calculations. If these estimates and assumptions turn out to be wrong, the agency may find itself in the position of having incurred a loss in its operations,

which will have to be recouped either from the borrowers or from governmental sources. Neither may be very willing to assume responsibility for such losses.

The alternative is to allow lending rates to vary strictly in line with variations in agency borrowing rates. This removes the danger of loss as the result of the lending agency having become involved in speculation on the course of interest rates. The policy has the disadvantage that changes in lending rates have to be announced at short notice and often at frequent intervals. In the United Kingdom, where this system is in force, there were six changes in interest rates for vessel construction during the year 1959 and ten during 1960. When such changes occur, the new rates apply to all loans and loan installments paid after the date of change but do not affect the rates on loans or installments already paid. A loan, paid in installments over the typical construction period of a large trawler, in accordance with the building contract stage payments, may therefore carry different rates of interest on different installments, and these differences will remain during the life of the loan. This creates serious administrative complications, particularly for the agency's accounting and collection departments. Various methods have been studied to find a solution to these difficulties. The prospective borrower, too, is faced with a problem. A decision to build a new trawler may be taken as much as two years prior to the date on which the completed vessel is ready for operation. In that period, interest rates may have changed very significantly, so that original calculations about profitability may have to be drastically revised. Unfortunately, after a certain stage, the owner is irrevocably committed to the project and must go through with it. Eliminating the element of uncertainty as far as future money rates are concerned must inevitably involve speculation on the part of one of the parties concerned - the government, the lending agency, or the borrower. The difficulty is to decide which of the three shall shoulder this unwanted burden. In the interest of industry development, it is clearly a problem which must be overcome as quickly as possible.

Repayment of loans

The many variations in assistance schemes that have already been noted in relation to the period of loans and the interest rates they carry, also

exist in respect of the methods of calculation of, and the procedures for, the collection of loan repayment installments.

A broad distinction can be made between methods of calculation based on fixed payments calculated by divisions of the principal and interest over the period of the loan, and payments which vary with the value of catches. A fixed payments system can either be based on equal divisions of principal and interest, or on equal divisions of principal plus interest payments calculated on the outstanding loan balance. Under the latter arrangement, total payments will become smaller as the outstanding loan balance is reduced. In support of this method, it can be argued that, once the initial "teething troubles" in the use of new equipment have been overcome, its earnings in the early years of its life are likely to be greater than in the later years.

An interesting variant of the fixed amount repayment system is found in South Africa, where fixed quarterly payments are made into boat and engine amortization funds in respect of the repayment portions of the loans.

In order to allow the vessel or equipment to overcome any initial troubles and to make a useful contribution toward loan repayments, it is often the practice to defer the first capital repayment installment for a limited period after delivery of the equipment. In the United Kingdom, the first capital repayment installment is not due until the second half-yearly term date (31 March or 30 September) after delivery of a vessel. Deferment extends, therefore, for at least six months and may be for almost a year, with an average deferment period of nine months. Where an agency is under similar repayment obligations to the source of its own funds, it is necessary to obtain similar deferment arrangements in respect of its own repayments. In a recently announced program of large vessel building in Norway (which provided for first and second mortgage loans), repayment of principal and payment of interest on the second mortgage loan was to be deferred until the first mortgage loan had been repaid.

The system of repayment by variable amounts based on earnings is also in common use. The proportion of earnings earmarked for loan repayment and interest varies between schemes. In certain cases it varies seasonally, according to the general level of earnings of the type of vessel concerned. The short-term loans made in Burma are repaid by deductions from sales proceeds at the end of the fishing season. In Hong Kong, a deduction of 25 percent of sales proceeds is made for small loans, while for larger capital loans the percentage varies from 15 to

20 percent of proceeds, in accordance with the borrower's ability to pay. In Canada, in the Provinces of Prince Edward Island and Quebec, 12.5 percent of the catch value is deducted and credited against the fisherman's debt. The scheme in the Federal Republic of Germany provides for 10 percent of vessel proceeds to be taken as repayments. In Ireland, where vessels and gear are supplied on hire purchase, a hirer's catches are sold either through the Irish Fisheries Board's marketing organization or through approved auctioneers. Between one quarter and one third of the net proceeds of the sale of fish are applied to meet marine insurance charges and hire purchase installments.

The main advantage of this system of relating repayments to the value of the catch is that a direct relationship is established with earnings, out of which repayments must eventually be made under any system. When earnings are high, repayments are high, the reverse being true when conditions are unfavorable in the industry. A fisherman who has consistently high catches will under this system pay off his indebtedness earlier than under a fixed payment system. The automatic "skimming of the cream" from all good voyages may act as a "disincentive" to the able fisherman at times when fishing is good, because he may feel that a large part of additional income earned through the expenditure of extra effort will be siphoned off by the lending agency. He may, therefore, consciously refrain from exercising himself as much as otherwise.

It is perhaps worthy of consideration whether a combination of systems might not be evolved to provide for a minimum fixed payment based on equal installments of principal and interest or a fixed percentage of the total catch, whichever is the greater. In such a combined system with a minimum payment guaranteed, the percentage of the catch value to be taken could be fixed at a considerably lower level than that at present applied in certain schemes, and the "disincentive" effect referred to above would thereby be reduced.

An ingenious and original scheme of loan repayment which is worthy of description is that at present in operation in Jamaica. The Jamaican Fisheries Division supply premixed and specially colored fuel to fishermen at prices below the commercial level. An extra shilling per gallon is added to this price for all fishermen purchasers who are operating government-supplied engines under existing credit sale agreements. This surcharge is credited against the fisherman's debt on his engine, and thus acts as an automatic "built-in" repayment device. In fact, the more

the vessel is used, the quicker the debt is repaid. Once repayment for the engine has been made, the fisherman is no longer liable to pay the surcharge.

An incentive which is applied in certain schemes is a rebate of interest made in consideration for early or prompt repayment of installments. In contrast, overdue installments of principal may automatically involve extra interest charges where installments of interest are calculated on outstanding loan balances. Overdue installments of interest may also be subject to further interest on the unpaid amounts.

A problem which arises under the fixed installment system concerns the treatment to be accorded to "out-of-course" payments, that is, payments made in advance of their due date. Many prudent fishermen, although only required to make fixed payments, like to make additional payments when earnings are good. Although this is a practice to be applauded, the lending agency may have some difficulty in dealing with the situation created by this practice, unless it is operating a revolving loan fund. On receipt of such payments, the agency has to decide whether to retain the amounts temporarily and invest them on a short-term basis, or itself make advance repayments to its own borrowing source. The first alternative involves it in financial work rather outside its sphere of operations, while the second alternative may mean that the fisherman who has made the advance payments cannot set them off at a later date against subsequent installments which he may be unable to meet, through a sudden change in his fortunes.

The timing of installment payments under fixed amount systems also is extremely varied. Payments at regular weekly, monthly, quarterly and half-yearly intervals are provided for in the schemes currently in force, the shorter periods generally relating to the shorter-term loans. Payments at the end of a voyage or a series of voyages, or at the end of a fishing season, are also made. In general, it can be said that the longer the period, the better the chance of evening out seasonal fluctuations in earnings. Too frequent collection throws a heavy burden on the administrators of schemes in organizing the necessary notices and collection arrangements and following up unpaid installments.

The collection arrangements, where percentage deductions are made from catches, involve the co-operation of the salesman, auctioneer or purchaser of the catch. The latter have to make the appropriate deduction and transmit it to the lending agency, which will credit the fisherman's loan account accordingly. A commission for collection may or

may not be paid. Collection systems of this kind will clearly work more speedily and effectively where marketing is carried out through a co-operative or other central marketing agency. Where catches are sold at a large number of small landing points, the difficulties of collection and supervision can be very great. A particular complication arises where fishermen are in the habit of landing catches at ports other than their home port. Routine arrangements for collection and transmission of installments by salesmen or auctioneers are difficult to organize in these circumstances.

Where fixed installments are payable, a variety of collection systems are in operation. The method used will depend on the system of marketing, the manner in which business operations are organized, and the general state of education and communications in the fishing community. The salesmen or auctioneers may again be used. In many cases, the salesmen act as general business managers for the fishermen, selling their catches, keeping their books and records, managing and supplying their vessels with equipment and crews, and dealing with such matters as the regular payment of principal and interest on outstanding loans.

Fishermen may also be encouraged to open banking or savings accounts, into which they will pay regular daily or weekly amounts from their sales proceeds and from which they will periodically draw the required amounts to meet their installments. A method encouraged in the United Kingdom is for the fisherman to make regular payments into a special savings bank account, which can only be drawn upon by the lending agency. The bankbooks are transmitted at half-yearly intervals to the agency, which withdraws the amounts due in respect of principal and interest payments and then returns the books to the fishermen.

In remote areas of developing countries, where communications are poor, it may be necessary to organize local collecting agencies or travelling mobile banks to collect the payments due. Where measures of this kind are necessary, the costs of administration of financial assistance will significantly increase. However, this seems unavoidable if amounts due from such communities are to be collected promptly and effectively. In such areas, the system of fixed deductions from sales proceeds seems to have a great advantage. It may be necessary, nevertheless, to organize improvements in the marketing system before the arrangements can be operated with any hope of success.

In conclusion, reference may perhaps be made to an effective, if unorthodox machinery of collection which has been in operation in Tangan-

yika. This included operation of a revolving fund scheme for the acquisition of nylon netting, under which additional loans could only be made as and when existing borrowers made repayment of outstanding loans. Considerable moral pressure was brought to bear on the latter to ensure prompt repayment. At times, private loans were even made to defaulting borrowers to enable them to repay and thus allow others to take advantage of the scheme.

Defaults and remedies

Most cases of default are concerned with failure to pay installments of principal or interest on loans. There are, however, other ways in which a borrower may be breaking his loan agreement. These include (*a*) unauthorized use of the vessel or equipment for purposes other than fishing, e.g., for pleasure boating, passenger carrying, etc.; (*b*) failure to carry on fishing operations diligently and vigorously; (*c*) use of a vessel or equipment in prohibited waters or for illegal fishing; (*d*) failure to maintain the vessel or equipment in good working condition; (*e*) failure to keep the vessel or equipment insured; (*f*) failure to keep adequate books and records; and (*g*) in the case of processing factories, their unauthorized use for purposes other than fish processing.

While default on repayments is the most serious for the lending agency, in that it may threaten the whole basis of its future operations, violations on these other conditions should not be treated lightly. They represent a misapplication or waste of assistance, which may thereby be denied to other applicants, and may seriously militate against the objectives of the financial assistance policy.

Where default has occurred in making payments due, recovery procedures are immediately put into operation. In certain countries - Japan is an example - special recovery officers are employed. Besides dealing with defaulters, these officers are also engaged in collection duties and are particularly valuable in making collections on loans where catches are landed by fishermen at ports other than their home ports. In other countries, the local field officers responsible for the earlier investigations into the applicants' personal circumstances are also given the task of making the initial contact with defaulters and informing headquarters of the circumstances of the default and, in particular, of any special local conditions which have brought it about. The field officers, too,

are given primary responsibility for noting and reporting breaches of loan agreements in the matter of record keeping or maintenance and unauthorized use of vessels for such purposes as pleasure boating and passenger carrying. A warning from the officer at an early stage of default or violation may often check these practices. It may be asked whether the employment of field officers on these enforcement duties does not adversely affect their relationship with the fishermen in their area and reduce their effectiveness in carrying out initial investigations into the circumstances of new applicants. Experience does not suggest that this danger is a serious one. It does, however, mean that the special qualities which field officers must possess, such as tact and understanding, must be combined with an element of firmness in dealing with borrowers who are patently not prepared to honor their legal obligations. In addition, it should be remembered that in all probability the field officer recommended assistance to the defaulting borrower, in which case he has a moral responsibility to the lending agency to do his utmost to bring the defaulter back into line.

The main sanction in case of default is the seizure of the vessel, equipment or other property on which the loan is secured. The decision whether or not to impose the sanction of seizure rests with the lending agency, unless the payments are guaranteed by another body. In the latter case, the agency will call on the guarantor to meet his commitment, and the latter then has to take the necessary action against the borrower. In Japan, in the case of default by a member of a co-operative, repayment is made by his society. If the individual society should find it impossible to meet its obligations, the federation to which it belongs would assume responsibility for payment.

It has been found that the sole provision of the remedy of seizure in case of breach of agreement raises difficulties in dealing with the less serious breaches. A decision to seize a vessel on account of a fisherman's failure to keep adequate records or because of occasional pleasure boat use of the vessel would undoubtedly be considered harsh. Minor breaches of this kind, on the other hand, are difficult to check in the absence of an effective sanction. It is for consideration how far a system of fines or monetary penalties could be written into loan agreements to deal with such breaches.

Some types of default are more easily dealt with. A failure to keep a vessel insured can be met by the lending agency paying the renewal premium and debiting it to the defaulter's loan account. The adminis-

trative problem here is to work out a system of routine checks with insurance organizations, so that a failure to renew a premium is immediately brought to the notice of the lending agency. Liaison with insurance organizations is also fruitful, in that a loss or damage claim payment due to a fisherman may be by mutual agreement applied to meeting arrears on loan account.

In the case of default on repayment, it is necessary to determine the reasons which have led to it. A poor fishing season, a man's ill health or misfortune in the nature of a vessel breakdown or damage to equipment may be factors which have brought about temporary financial embarrassment. In such cases, a liberal and sympathetic attitude is taken, and arrears are carried forward in the hope and expectation that they will be cleared in a subsequent period of operation. Where, however, payment default is persistent and there is reason to think that the borrower is unlikely to meet his commitments in the future, either by reason of ill health or more commonly because of incompetence or laziness, the immediate need is to arrange for the equipment to be put into the hands of a fisherman more likely to operate successfully with it. This can be done either by seizure by the agency and by subsequent sale, or by arranging for the transfer of the property from the present owner to a new owner with the parallel transfer of the outstanding loan obligations. Where the outstanding loan amount represents a high proportion of the original cost of the vessel or equipment, it is unlikely that the price realized on a forced sale in the open market will meet the loan commitment. Where loans are made only in respect of new equipment - and particularly where construction grants are also payable - the value of second-hand vessels tends to be depressed. Where forced sales of mortgaged property are carried out, it is necessary to take precautions against unscrupulous persons speculating on default and buying back at a much lower price equipment on which they have defaulted.

It is clearly to the advantage of the agency and the industry that the vessel or equipment should continue to be used for the purpose for which it was originally intended. For this reason, a suitable transfer arrangement is the object to be aimed at in case of default and clearly established inability of the borrower to continue operating. In the case of death, too, transfer is often desirable, particularly where sons or other relatives of the deceased are anxious to carry on fishing operations with the vessel or equipment.

The main problem in securing a satisfactory transfer is in finding a

suitable person to take over the liabilities. The transferee must be investigated in the same way as a new borrower and must have the necessary personal qualities and financial resources to secure acceptance by the lending agency. It may, however, be necessary to accept a particular transferee, in the absence of any other interested persons, who would not be accepted as an applicant for a new loan. The agency may also have to accept arrangements which provide for a transfer of only part of the liabilities.

In any major scheme of loan assistance there will inevitably be bad debts, resulting from payment defaults which cannot be recovered from the proceeds of forced sale or from the application of transfer arrangements. These bad debts must be met either from a fund built up through adding to the interest rate charged to borrowers, or created through a special contribution by the government or other source of lending funds. In the first case, the effective rate of interest will reflect the risk element represented by bad debts; in the second, the special contribution is in fact a direct subsidy to interest rates. Where the bad debts have accrued in the normal course of administration of an extensive assistance scheme, a general addition to interest rates to build up an adequate reserve fund seems the most suitable procedure. Where the losses have been brought about by special unforeseen circumstances, such as natural disasters or the sudden collapse of a fishery, the case for a special contribution to cover such losses is much stronger. A general depression in the fishery industry could bring the need for a moratorium on debt repayments. In such a case, if some central intervention to cover bad debts or guarantee repayment is not forthcoming, the sources of further capital for the industry may completely dry up.

Records and returns

A common requirement made under the provisions of aid schemes is that recipients of assistance keep adequate books and records, make them available for inspection by officers of the lending agency, and submit periodic financial and statistical returns. For companies and larger organizations this requirement causes no difficulty, although delay in completion of accounts and submission of returns is unfortunately only too common and is a serious hindrance to the effective study of results by the lending agency.

For the smaller fisherman, the keeping of books and records is often a laborious and difficult job. A man may be an efficient and successful fisherman in spite of being illiterate. The fisherman's training in bookkeeping is generally nil. Yet it is very important that he should have a reliable guide to the financial success of his ventures if he is to improve his earnings and efficiency and make the best use of the financial assistance given to him. In an attempt to overcome this problem, the White Fish Authority in the United Kingdom has prepared, in collaboration with the organizations of inshore fishermen, a simple standard form of account book for the use of the smaller fisherman. The book, which is in two sections, provides in the first section for weekly entries of catches and analysis of direct expenses, such as fuel, ice, harbor charges, and the division of the balance of operating profit into boat, crew and gear shares. In the second section, the boat (or owner's) share is broken down into costs of maintenance, repair, etc., leaving a net balance of profit on boat account. Keeping of records in this, or in similar form, is made a condition of financial assistance, and an annual return or submission of books is required. Field officers of the Authority give the fisherman any help he may need in keeping these records. Statistical summaries of the annual results are prepared by the Authority, and appropriate extracts are sent to the fisherman for comparison of his own performance with the average for the size and type of his own fishing craft. Such summaries are invaluable to a lending agency in assessing the success of its aid policies in achieving its objectives. They may also point to the need for a change in aid policy in specific directions. For example, if a particular section of a fleet is tending to become overexpanded, with a trend toward lower earnings, it may become necessary to curtail further aid to that section.

Administrative personnel and costs

The basic objective in the administration of financial assistance schemes is speed of action and decision in dealing with applications for aid. Speed of handling by the administration must also be related to a reasonable economy in operating expenses, so that in practice a balance must be struck between speed and cost. Sound organizational techniques will assist in securing this balance. Planning for handling the general, financial and technical aspects of an application simultaneously, and effective

delegation of responsibility for taking decisions on applications, contribute very largely to speed of processing. Where the various investigational aspects are in the hands of a single organizing unit, speed will normally be greater than where a number of different organizations and additional co-ordination problems are involved. A careful estimate has to be made of the appropriate size of teams of field officers and technical officers. Large teams will secure speed but only at additional expense. In this matter also, a balance must be struck between the desire of speedy handling and the objective of financial economy.

The method of administration and distribution of financial aid will largely determine the qualifications required by the administrators. Where, as in the Netherlands, a bank is responsible for the administration of the credit scheme, personnel trained in banking or credit matters are in direct control. They have to obtain advice on fishery matters from experts, such as economists and technologists familiar with the fishery industry. The opposite approach is adopted in the United States. Decisions are taken by fishery rather than financial experts, the latter being called on in an advisory capacity. The balance of advantage would seem to lie with a greater emphasis being given to fishery, as opposed to purely financial, considerations in the administration of aid, although whatever form of organization is adopted it must give weight to all the considerations that apply - fishery, financial and technical.

Whereas supervisory administrative staff should ideally have a wide experience of financial, economic and fishery industry matters, the qualifications required for field and technical staffs should place more emphasis on practical experience in fisheries and in extension work among fishermen. Field officers, besides having this practical experience, must know the provisions of the loan schemes, must be acquainted with the particular fisheries with which they are to deal, and with the customs and way of life of the fishermen. They must be flexible, adaptable and tactful in carrying out their duties in connection with the selection of beneficiaries. The extension work carried out by them would include the assessment of the effects of financial assistance in their areas and reporting to the administering authority to assist in the planning of future policy and operations.

In developing countries, the need for personnel to carry out the administrative and field work of assistance schemes is particularly urgent. It is unfortunate that graduates of training courses for administration or extension work, upon return to their own countries, frequently go into

politics or other more remunerative fields than those in which they have been trained, and are thus lost to fisheries. The loss is twofold - the loss of the trained graduate and the loss of the training facilities and time which he has taken up. One of the most important contributions to the promotion of fishery development that other countries and international organizations such as FAO can make is the giving of assistance in the formation of cadres of administrators of credit schemes. Expert advice in the organization and operation of fishery credit schemes and training of staffs for newly organized schemes can be provided under the technical assistance program of FAO. In response to requests, FAO may recruit experienced administrators to visit the countries and assist their fishery services in establishing appropriate procedures. Alternatively, it can provide opportunities for personnel of the fishery services of the countries requesting assistance to study fishery credit operations through attendance at training centers or as holders of FAO fellowships.

Another suggestion for the personal exchange of experience is to hold regional seminars to review fishery credit problems in a particular area, to be attended by the officers directly concerned with the drawing up and execution of fishery credit policies. This idea is currently being studied by FAO in relation to its future program of work and budget.

It is very difficult to make an accurate estimate of the administrative costs of credit schemes. A recent calculation made by the White Fish Authority in relation to the costs of its functions of administering financial assistance schemes showed that costs in the financial year 1959/60 represented 0.65 percent of new financial assistance made in that year and 0.22 percent of total grants and loans outstanding. It must be borne in mind, however, that a large proportion of this assistance is made available to companies for the construction of large fishing vessels. Costs of administration relative to assistance to the smaller fishermen would be very much higher than the above figures. Where an organization is engaged in duties in addition to those related to credit schemes, e.g., as in the case of a government fisheries department or a co-operative society, the calculation of costs of administration of its aid section is complicated by the need to allocate overhead expenses, such as rent, salaries of senior staff, etc., between its various functions. Again, an organization such as a credit bank, responsible only for the disbursement and collection of loan money, and calling on outside expert advice on technical and economic matters, will have lower direct administrative costs than a body combining all these functions within its own organization.

Whatever the level of costs may be, they have to be met in one of two ways: either by making a charge on the borrowers, or by direct contribution from government sources. Both methods are in operation and are subject to the same comments which have been made with respect to bad debts. If a margin on interest rates is levied by the lending agency, the contribution is made directly by the recipients; if an outside contribution is made, it is, in fact, an additional element of the financial assistance made to the industry.

8. CO-ORDINATION AND REVIEW OF FISHERY CREDIT POLICIES

The co-ordination and review of policies is most conveniently carried out on three levels:

1. The industry level, in relation to the policies of the lending agencies.
2. The national level, in relation to the policies of the goverment departments in charge of fisheries matters.
3. The international level, in relation to the policies of national governments.

The policies of the lending agencies in making assistance available to the fishery industry must be co-ordinated between sectors of the industry, geographical areas, the various fisheries, the different purposes for which funds are made available, and the different economic groups to whom aid is extended. While not all schemes embrace all these variations, where a number of the factors has to be considered, the problem of co-ordination becomes a significant one, requiring much thought and calling for a clear definition of objectives on the part of the lending agencies.

Where there are several agencies involved in a single industry, or where an agency is responsible only for the distribution of financial assistance and not concerned with other aspects of fisheries, further co-ordination problems arise between the agencies and between the financial agency and the agencies responsible for the other aspects. It is in this respect that a significant advantage emerges for credit assistance through a single agency responsible for all aspects of the industry, whether a government fisheries department or a specialized institution with wide fishery responsibilities.

A prerequisite of effective co-ordination and control of policies is infor-

mation about the state of fisheries in all of its aspects. The information is normally made available through regular returns and studies, both general and statistical, which may be organized by the agency itself, or supplied through national statistical machinery. Figures of output, earnings, costs, manpower, fishing effort, etc., are all necessary to a proper evaluation of the effects of fishery policies. The greater the amount and detail of the information available, the easier it is to draw reliable conclusions from its analysis. It should, therefore, be a primary duty of all lending agencies to ensure that adequate information about the industry's progress is available to it. If such information is not available, the agency should take steps to organize its collection. It is often in a position to require compulsory submission of information and returns as a condition of the making of financial assistance.

With a reliable industry analysis at its disposal, the agency can then proceed to review its policies and assess whether they promise to achieve their objectives, or in what ways policies need to be adjusted in the light of the trends revealed by the analysis. It may be found that certain sectors are developing more rapidly than is desirable, when measured against the progress which has been made in the development of other sectors. Catches may be increasing, through mechanization, to a level which the shore facilities and distribution machinery are unable to deal with, and early steps are, therefore, necessary to redress the balance and ensure effective handling of the larger catches. Similarly, it may be shown that a particular section of a fleet is in danger of increasing its catching capacity beyond a level with which the fishing grounds can safely cope. Action may, therefore, be necessary to curtail this expansion, in the interests both of the future of the grounds and the earnings of the fishermen concerned.

The analysis may not only show imbalance between the various sectors of the industry, catching, processing and distribution, but also between development in the different geographical areas and in the progress of various groups of fishermen. In the United Kingdom, several of the major fishing ports took early advantage of the grant and loan assistance scheme to rebuild a substantial part of their fishing fleet. Other ports, however, made little or no use of the aid facilities. Moreover, in certain areas where trawler-owning firms showed little interest in rebuilding, seine net vessels were constructed in considerable numbers with financial assistance. In such circumstances, the agency has to decide whether to allow these tendencies to continue - to permit certain ports to develop

and to disregard that others may be declining, and to encourage one type of fishing to be replaced by another, on the argument that these trends are part of the economic development of fisheries - or to take special steps to encourage lagging ports to take advantage of aid, and to restrict the volume of aid offered to rapidly increasing sections. The problem is complicated by the fact that the agency may be aware of special circumstances which are affecting development, for example, the fact that the bulk of the vessels, at certain of the ports that have not taken advantage of aid, are in the ownership of family firms that, because there are no young members of the family eventually to take over, have no incentive to re-equip and modernize. It is virtually impossible to lay down principles for policy decisions in such situations. In general, financial assistance policies should work with, rather than against, economic trends, but special conditions must always be considered. Full and complete information on all aspects of the industry, social and political, as well as economic, is the best guarantee that policy decisions will be taken with proper regard to all relevant factors.

A study of the progress of aid schemes, besides enabling stock to be taken of the position reached, will also facilitate the forecasting of future credit needs and allow early decisions to be taken on policy changes. It is very important that the industry shall be given reasonable knowledge of the likely future course of credit assistance, to give entrepreneurs an opportunity to plan ahead with confidence. While a flexible credit policy is necessary, the industry must nevertheless be assured of reasonable notice of any fundamental change in policy which might affect basic investment decisions, if undesirable trends in development are to be checked before they have done too much damage.

Although the amounts of lump sum and revolving appropriations to lending agencies are normally made with regard to estimated credit needs, it may happen that through imbalance in the demand for assistance, which has not been immediately corrected by the agency, the total funds available may approach exhaustion before certain vital objectives in the development plan have been achieved. It may, therefore, be necessary, at an advanced stage of the program, to halt the giving of assistance in certain directions and concentrate the balance of funds within a limited field. It is for consideration that where a lending agency is given funds to carry out development on a wide and varied front, it should privately make a deliberate allocation of the available money between the various objects, on the basis of the best estimate it can make of likely relative

needs and demands. In general, such planning should be internal and unpublicized. The allocations should also be revised at regular intervals in the light of actual progress of the various programs.

In addition to the regular reviews of progress of credit schemes carried out within the lending agencies, it is also important to discuss with representative bodies within the industry itself the current problems in credit administration and the trends revealed by analysis and inquiry. Where major changes in objectives are involved or restrictions on aid to particular overdeveloped sections are proposed, it is most desirable to secure industry agreement to, or at least acquiescence in, the changes, so that agency decisions in relation to individual aid applications can be supported by reference to prior industry consultation.

In co-ordinating policies and securing the desired objectives of assistance, it may be necessary for an agency to differentiate between various types of organization within the industry and even to encourage organizational changes in the interests of a speedy and economical achievement of results. It has been argued, for example, that the smallest economic unit of ownership of the larger steel trawlers, to cover the overhead costs of shore management services, is six vessels. Should aid for the building of such vessels, therefore, be confined to organizations owning at least this number of vessels, and should deliberate encouragement be given to smaller units to amalgamate or join a larger group? Social as well as economic co-ordination of policy may require some aid to be accorded to the smaller units and to the newcomer, but the bulk of aid would probably have to be channelled to the larger units.

Co-ordination and review at the national level is primarily a matter for the government's fisheries administration. It is aimed at securing a proper balance between different segments of a country's economy, as well as co-ordination between federal and state fishery policies. Agriculture has in many countries been closely related to fisheries, because it has many similar features, and for this reason is often under the same governmental administrative control. With few exceptions, however, the importance of agriculture in the national economy greatly exceeds that of fisheries, so that the latter has tended to be the "junior partner" and has often, it is claimed, received less favorable treatment in the matter of governmental assistance. Both industries are suppliers of essential foodstuffs, so that a national food supply and nutritional policy must preserve a proper balance in the aid given toward their development.

Another industry directly concerned with fishery aid policies is the ship-

and boatbuilding industry. Large fishing vessel construction or improvement programs must have regard to boatyard capacity and the competing demands of other shipowners for building space. Construction of fishing vessels, whether of wood or steel, is a specialized branch of shipbuilding, so that capacity in most countries both in yards and skilled labor is relatively limited. Co-ordination must ensure that development programs are within the capacity of the shipbuilding industry to meet. If this is not the case, provision must be made for some overseas building of vessels to make up any deficit. Too heavy pressure on building yards will lead to increases in vessel prices and delays in construction. Available assistance funds will, therefore, produce fewer units and the progress of modernization and reconstruction will be slower than planned. Any changes in aid policies fundamentally affecting the demand for building space should also have regard to the interests of the shipbuilding industry. It is clearly the government's function to carry out this co-ordination. The lending agency cannot concern itself with the effect of changes in its policies on industries other than the fishing industry, which is its primary concern.

Other matters in which governmental co-ordination with fisheries policies is desirable concern (*a*) foreign trade policy; (*b*) import and export duties and general taxation; (*c*) financial policy; and (*d*) the general state of the economy. Co-ordination in these fields must be between the fisheries department and the other departments of government concerned, viz., the departments responsible for matters relating to trade, finance, and economics.

In the international sphere, co-ordination of national fisheries policies has not proceeded very far to date. While there has been co-operation and co-ordination of fishing effort and methods in certain areas through countries adhering to fishery conventions, and considerable exchange of scientific, technical and statistical information through such bodies as the International Council for the Exploration of the Sea (ICES), the International Commission for the Northwest Atlantic Fisheries (ICNAF), and FAO, there has been little co-ordination of economic and financial policies. Fisheries by their nature are international in character, because of the exploitation by a number of fishing nations of common fishing grounds. Such exploitation, being competitive, may lead to a decrease in catches as the result of a reduction of the fish stocks, which in turn may give rise to demands by the various countries for the exclusion of others from the grounds or for other controls over their activi-

ties. Governments are inevitably involved in negotiations about control, and any international agreement that adversely affects the domestic industry is likely to lead to demands for compensation, by special financial assistance or in other ways. Moreover, governments are more inclined to pursue with respect to fisheries a "beggar my neighbor" policy, by encouraging their own fisheries and favoring restrictions on those of other countries, with the aim of obtaining a larger share of the total catch so as to improve their bargaining position in negotiations on regulation.

Such policies naturally invite retaliation. To the extent that the latter takes similar forms and is effective, all countries are the losers. Mere realization of this does not always result in the abandonment of such policies. Rather, efforts are made to apply assistance in ways that seem least likely to provoke countermeasures by other countries. Manipulation of internal marketing, price support schemes, and favorable credit policies may be useful in this direction.

In these circumstances, it is most desirable that governments should see the need for discussion and exchange of knowledge on credit assistance to fishery industries, with a view to producing international agreement on policies based on sound economic principles and reasoning. Agreement on, and co-ordination of, credit policies is just as important as on fisheries regulation and trade in fish products. Developing areas of general economic co-operation in Europe give this much topical importance. As a first step, agreement to discuss the problem in relation to specific fishing grounds, and to carry out studies on an international basis, might be secured. "Confrontation" exercises of the kind which have and are continuing to be regularly carried out in regard to fisheries and other industries by countries of the Organization for Economic Co-operation and Development may serve as a useful pattern for wider adoption, involving as they do, a statement of one's own national fishery policies, and cross-examination by other countries on the reasons and justification for them.

The treatment of fisheries policies in arrangements made within the European Economic Community (EEC) is worthy of mention as a possible pattern for future international co-ordination. Of the six countries concerned - Belgium, France, Italy, Luxembourg, the Netherlands and the Federal Republic of Germany - four exploit the same fishing grounds in the North Sea and the northeastern Atlantic, and in all of these, programs of modernization and re-equipment have been operated. Both

for agriculture and fisheries, EEC policies have been slow in being worked out, but it appears that at present there are three possible lines of policy:

1. Common rules concerning competition between the members.
2. Co-ordination of national marketing organizations.
3. A European marketing organization.

Whatever policies may finally be agreed, the aims of the EEC toward fisheries have been stated to be:

(*a*) increased productivity;

(*b*) a reasonable standard of living for all engaged in the fishery industry;

(*c*) stabilization of the market for fish;

(*d*) regularity of fish supplies; and

(*e*) reasonable prices to the consumer.

In the event of the United Kingdom and other members of the European Free Trade Area joining the EEC, fishery policies in western Europe might be truly co-ordinated. The desirability of a common policy for the whole region was emphasized in a plan for a Western European Fisheries Community, which was put forward by the British fishery industry and discussed with the other leading European fishing countries. This plan, designed to secure rational exploitation of the fishing grounds, freedom of trade and movement, and a more economic use of resources of capital and manpower and co-ordination of research effort, may not now be required if the extension of the scope of the European Economic Community comes about. Under whoever's auspices arrangements may be organized, it seems inevitable that in the near future the western European countries will have to agree on co-ordinated fisheries policies. Such co-ordination will certainly have to include financial assistance policies, if it is to be effective.

While the need for co-ordination is undoubtedly greatest in respect of the very heavily fished waters of the western European area, other regional arrangements may be developed in the Mediterranean, Indo - Pacific, West Africa, and southwest Atlantic regions. In none of these areas does the need for full co-ordination appear quite so pressing as

in western Europe. The speed of development of fisheries in these areas, however, thanks to extensive financial and technical assistance, is extremely high. While co-ordination is being supported by many of the developed countries, in realizing the folly of unrestricted competition on their fishing grounds and in their fisheries policies, it is hoped that the developing nations will learn from the mistakes of others and adopt co-ordinated policies, so as to avoid, rather than to have to repair at a later stage, the damage that failure to co-operate in the exploitation of fishery resources brings with it. The tremendous increase in fishing effort off the whole of the west coast of Africa, by African nations as well as by nations as far away as the U.S.S.R., Poland, and Japan, points to the need for early attention to co-ordination in this area. That this need is realized is borne out by the proposal to undertake a full-scale survey of the Gulf of Guinea grounds in the near future. In the absence of an economic and political grouping of the countries concerned, as in western Europe, it may be necessary for an international organization, such as FAO, to take the first steps toward securing agreement on policies among the nations concerned in the other areas.

In conclusion, what can be said about the future? In developing countries, a continued increase in productivity and catching power can be expected, probably at an even faster rate than in the past. The greatly increased supplies of fish will require further steps to be taken to improve the handling, marketing and distribution of the catch. It is probable that these latter fields will require a much larger proportion of assistance than in the past. Large capital investment in fisheries will still be needed, and much of this may still have to be found by international financing agencies. There is clearly a need for a far wider knowledge of the capital investment possibilities and requirements of developing fisheries, and careful and well-documented resource and development surveys should be carried out by the governments with the expert help of international institutions. There will be an ever-growing need for private investment to supplement and eventually to take the place of help from international aid organizations. To give the necessary confidence to investors, political and economic policies will need to be stable.

In the developed countries, the way ahead is not so clear. Pressure on the limited resources of the nearer waters will undoubtedly continue, even if the present national policies of unrestricted competitive effort are altered in favor of greater co-operation. New grounds will have to be found and exploited. This may well involve employment of new

vessels and equipment, new catching and preservation techniques at sea, and new marketing and distributive arrangements to deal with the changing nature and form of landings. Large capital investments will be required to carry out these changes, and financial aid from governments may have to continue for some time to come. The ultimate objective must, however, be the creation, through assistance, of economically viable industries, modern and efficient, supplying first-quality fish at reasonable prices, and able through their productivity and efficiency to stand on their own feet and compete for capital for development on equal terms with other major industries.

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